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1919. Vol. CXV. Part II., pp. 713-end

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FORMULA INDEX.

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The elements are given in the order C, H, O, N, Cl, Br, I, F, S, P, and the remainder alphabetically.

The compounds are arranged—

Firstly, in groups according to the number of carbon atoms (thus C₁ group, C₂ group, etc.).

Secondly, according to the number of other elements besides carbon contained in the molecule (thus 5 IV indicates that the molecule contains five carbon atoms and four other elements).

Thirdly, according to the nature of the elements present in the molecule (given in the above order).

Fourthly, according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of quaternary ammonium bases, however, are registered as group-substances.

C₁ Group.

CH₄ Methane, equilibrium in the system: carbon, hydrogen and (COWARD and WILSON), 1380.

CO Carbon monoxide, combustion of, in hydrogen (RIDEAL), 993.

CO₂ Carbon dioxide, pressure of, in sea water (PRIDEAUX), 1223.

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CHN Hydrocyanic acid, catalytic reduction of (BARRATT and TITLEY), 902.

CH₃N₃ Diazomethane, interaction of, with carbamide and thiocarbamide (WERNER), 1163.

CH₃N Methylamine, preparation of, from chloropicrin (FRANKLAND, CHALLENGER, and NICHOLLS), 159.

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CH₃ON₂ Carbamide, decomposition of, in presence of nitric acid (PRICE), 1354; interaction of, with diazomethane and diazoethane (WERNER), 1168.

CH₃N₂S Thiocarbamide, interaction of, with diazomethane and diazoethane, and its oxidation with potassium permanganate (WERNER), 1163.

CO₂NCl₂ Chloropicrin (GARDNER and FOX), 1188; reduction of (FRANKLAND, CHALLENGER, and NICHOLLS), 159.

C₂ Group.

C₂H₂ Acetylene, propagation of flame in mixtures of air and (MASON and WHEELER), 578; action of mercuric chloride with (CHAPMAN and JENKINS), 847.

C₂H₆ Ethane, ignition of mixtures of air and (WHEELER), 81.

2 II

C₂H₂O₂ Oxalic acid, double salts of, with the alkali metals (RIVETT and O'CONNOR), 1346.

C₂H₃O₂ Acetic acid, vapour pressure and dissociation of, in solution (McBAIN and KAM), 1332; lead sub-salt (DENHAM), 109; silver salt, solubility of, in acetic acid (KNOX and WILL), 853.

C₂H₃N₃ Diazoethane, interaction of, with carbamide and thiocarbamide (WERNER), 1163.

C₂H₅O Ethyl alcohol, ignition of mixtures of ether, air and (WHITE and PRICE), 1452.

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$C_4H_8O_2N_2$. Nitrosomethylurea, preparation and properties of (WERNER), 1095.

C₃ Group.

$C_3H_3N_3$. 2-Aminoglyoxaline, and its salts (FARGHER and PYMAN), 246.

C_3H_6O . Acetone, vapour pressure and density of mixtures of methyl ethyl ketone and (PRICE), 1116; ignition of mixtures of air and (WHITE and PRICE), 1462.

$C_3H_4O_2$. Methyl acetate, rate of hydrolysis of, by hydrochloric acid (BURROWS), 1230.

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C_3H_8O . Glycerol, and its nitric esters, absorption spectra of (HEPWORTH), 840.

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$C_3H_5ON_2$. Cyanoacetamide, condensation of ketones with (KON and THORPE), 686.

$C_3H_5N_3S$. Ethylisothiocarbamide, and its picrate (WERNER), 1172.

C₄ Group.

C_4H_8 . *β*-Butylene, preparation of (KING), 1406.

4 II

$C_4H_6O_6$. Tartaric acid, rotation dispersion of alkyl esters of (FRANKLAND and GARNER), 636.

$C_4H_5N_3$. 2-Methylglyoxaline, and its salts (FARGHER and PYMAN), 231.

C_4H_8O . Methyl ethyl ketone, preparation of, from *n*-butyl alcohol (KING), 1404; vapour pressure and density of mixtures of acetone and (PRICE), 1116.

$C_4H_{10}O$. *n*-Butyl alcohol, pure, preparation of, and the detection of impurity in it (ORTON and JONES), 1194.

Ethyl ether, ignition of mixtures of alcohol, air and (WHITE and PRICE), 1462.

$C_4H_{10}S$. Ethyl sulphide, reactions of, with mercuric iodide and alkyl iodides (RAY and GUHA), 1154.

$C_4H_{11}N$. Butylamine, preparation of (WERNER), 1010.

4 III

$C_4H_5O_3N_2$. Nitromethylglyoxalines (FARGHER and PYMAN), 234.

$C_4H_7ON_2$. Alacreatine, preparation of, and its salts (FARGHER and PYMAN), 253.

$C_4H_9O_4N_2$. Glyceryl methyl ether dinitrate (JONES), 76.

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C_4H_5NCIS . 2-Chloro-4-methylthiazole (TCHERNIAC), 1072.

C_4H_5ONS . *α*-, *β*-, and *iso*-Methylrhodim (TCHERNIAC), 1075.

Thiocyanoacetone, and its isomerides (TCHERNIAC), 1071.

C₅ Group.

$C_5H_7N_2$. 4:5-Dimethylglyoxaline, and its hydrochloride (FARGHER and PYMAN), 233.

$C_5H_{10}N_2$. Diazoisopentane (WERNER), 1101.

$C_5H_{12}O$. Amyl alcohol, use of, as a membrane (DONNAN and GARNER), 1313.

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$C_5H_7O_3N_2$. Glyoxaline-4:5-dicarboxylic acid, preparation of, and its sodium salt (FARGHER and PYMAN), 227.

$C_5H_9O_3N_2$. 2-Aminoglyoxaline-4:5-dicarboxylic acid (FARGHER and PYMAN), 259.

- $C_8H_9O_3N_2$ 2-Methylglyoxaline-4-carboxylic acid, and its salts (FARGHER and PYMAN), 230.
 $C_8H_9ON_3$ 2-Acetylaminoglyoxaline (FARGHER and PYMAN), 248.
 $C_8H_9O_2N$ Ethyl cyanoacetate, condensation of ketones with (KON and THORPE), 686.
 $C_8H_{11}O_2N_2$ Nitroso-*n*-butylurea (WERNER), 1101.
 $C_8H_{12}ON_2$ *n*-Butylurea (WERNER), 1101.

5 IV

- $C_8H_2ON_4Fe$ Nitroprussic acid, alkali and methylammonium salts (BURROWS and TURNER), 1429.
 $C_8H_9ON_2Cl$ Glyoxaline-4-acetyl chloride, hydrochloride of (FARGHER and PYMAN), 1019.
 C_8H_7ONS Dimethylrhodim (TCHERNIAC), 1076.

 C_8 Group.

- $C_8H_8O_4$ Substance, from acetic anhydride and aconitic acid (TAYLOR), 889.
 $C_8H_8O_4$ Aconitic acid, presence of, in sugar-cane juices, and its detection (TAYLOR), 886.
 $C_8H_8S_2$ 2,5-Dimethylthien (TCHERNIAC), 1085.
 $C_8H_{10}N_2$ 2:4:5-Trimethylglyoxaline, and its picrate (FARGHER and PYMAN), 238.

6 III

- $C_8H_4N_6Fe$ Ferrocyanic acid, copper salt, use of, as a membrane (DONNAN and GARNER), 1313.
 C_8H_7ClS *p*-Chlorophenyl mercaptan, reaction of, with mercuric nitrite (RÄY and GUHA), 1154.
 $C_8H_7O_2Se$ Phenylselenious acid, preparation of, and its sodium salt (PYMAN), 167.
 $C_8H_7O_2Se$ Phenylselenic acid, and its salts (PYMAN), 169.
 $C_8H_9O_2N_2$ 2-Ethylglyoxaline-4-carboxylic acid, and its picrate (FARGHER and PYMAN), 1017.
 $C_8H_{11}O_2N$ 4-Hydroxyhygric acid (GOODSON and CLEWER), 926.
 $C_8H_{11}ON$ Diacetonsamine, preparation and reactions of (EVERES), 588.
 $C_8H_{11}O_2N$ Nitrosoisomylurea (WERNER), 1101.

6 IV

- $C_8H_7O_2NSe$ *m*-Nitrophenylselenious acid (PYMAN), 169.
 $C_8H_7O_2NSe$ *m*-Nitrophenylselenic acid, and its salts (PYMAN), 170.
 $C_8H_7O_2NSe$ *m*-Aminophenylselenic acid, and its sodium salt (PYMAN), 175.

6 V

- $C_8H_7O_2NIS$ Iodoanilinesulphonic acids, conductivity of (BOYLE), 1505.

 C_7 Group.

- C_7H_8 Toluene, determination of purity of (ORTON and JONES), 1055; commercial, estimation of the purity of (LUMDEN), 1366.

7 II

- C_7H_7N Methylaniline, preparation of (FRANKLAND, CHALLENGER, and NICHOLLS), 198.
 C_7H_7S *p*-Tolyl mercaptan, reaction of, with mercuric nitrite (RÄY and GUHA), 1152.
 $C_7H_{12}O_2$ *cyclo*Hexanecarboxylic acid, preparation of (INGOLD and THORPE), 376.

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7 III

- $C_7H_{10}O_2N_2$ Ethyl 2-methylglyoxaline-4-carboxylate (FARGHER and PYMAN), 1017.
 $C_7H_{10}O_2N$ Betonicine, and its salts (GOODSON and CLEWER), 932.
 Turicine, and its salts (GOODSON and CLEWER), 931.

7 IV

- $C_7H_8O_3NAs$ 1:2-Dihydrobenzoxazolone-4-arsinic acid (FARGHER), 991.
 $C_7H_5O_3N_2As$ 5-Nitro-6-amino-*m*-tolylarsinic acid (FARGHER), 989.
 $C_7H_8O_3N_2As$ 1:3-Benzodiazolearsinic acids (BAXTER and FARGHER), 1372.
 $C_7H_8O_3N_2As$ 7-Methyl-1:2:3-benzotriazole-5-arsinic acid (BAXTER and FARGHER), 1378.
 $C_7H_{11}O_3N_2As$ 5:6-Diamino-*m*-tolylarsinic acid (BAXTER and FARGHER), 1377.

C_8 Group.

- $C_8H_{12}O_4$ *cyclo*Hexane-1:1-dicarboxylic acid (INGOLD and THORPE), 376.
 $C_8H_{12}O_6$ γ -Methylbutane- $\alpha\beta\gamma$ -tricarboxylic acid, preparation of (THORPE), 634.
 $C_8H_{16}O_5$ Dimethyl methylarabinoside (IRVINE and DICK), 599.
 $C_8H_{18}N$ *n*-Dibutylamine, preparation of (WERNER), 1010.

8 III

- $C_8H_5O_4Br$ Bromoisuginic acid (MANNING and NIERENSTEIN), 664.
 $C_8H_5O_3N_3$ Nitrosobenzylurea (WERNER), 1101.
 $C_8H_6N_2S_2$ Dithiazylamine, and its hydrochloride (TCHERNIAK), 1082.
 $C_8H_{10}ON_2$ α -Cyano- Δ^1 -*cyclopentene*acetamide (KON and THORPE), 697.
 $C_8H_{12}O_2N_2$ Ethyl 2-ethylglyoxaline-4-carboxylate (FARGHER and PYMAN), 1018.
 $C_8H_{10}O_4N_2$ Ethyl α -hydroxy- β -glyoxaline-4-propionate (FARGHER and PYMAN), 1020.
 $C_8H_{10}O_2N$ Oscine, and its salts, resolution of (KING), 476.
 $C_8ON_2S_2$ Substance, from chloropictin and the potassium salt of 2:5-dithiol-1:3:4-thiodiazole (RAY, GUHA, and DAS), 1312.

8 IV

- C_8H_9ONSe *m*-Acetylaminophenylselenious acid, and its sodium salt (PYMAN), 173.
 $C_8H_9ON_2As$ Methyl-1:3-benzodiazole-5-arsinic acids (BAXTER and FARGHER), 1377.
 C_8H_9ONSe *m*-Acetylaminophenylselenic acid, salts of (PYMAN), 174.

C_9 Group.

- $C_9H_9O_2$ Atropic acid, preparation of (McKENZIE and WOOD), 834.
 Cinnamic acid, molecular refractivity of derivatives of (WALKER and JAMES), 1248.
 $C_9H_9N_4$ 2-Phenylglyoxaline, preparation of, and its salts (FARGHER and PYMAN), 232.
 $C_9H_9N_4$ Benzeneazoglyoxaline (FARGHER and PYMAN), 237.
 $C_9H_9O_3$ Atrolactic acid, preparation of (McKENZIE and WOOD), 833.
 α -Hydroxy-*m*-tolylacetic acid (GOUGH and THORPE), 1162.
 Tropic acid, and its salts, resolution of (KING), 476.
 Tropic acids, preparation of (McKENZIE and WOOD), 828.
 $C_9H_9N_4$ 2-Amino-4-*p*-aminophenylglyoxaline, and its salts (FARGHER and PYMAN), 239.
 $C_9H_9O_2$ *cyclo*Pentane-1:1-diacetic anhydride (KON and THORPE), 700.

$C_9H_{11}O_3$ β -Methyl- β -isopropylglutaric anhydride (KON and THORPE), 702.

$C_9H_{12}O_4$ *cyclo* Pentane-1:1-diacetic acid, and its silver salt (KON and THORPE), 700.

$C_9H_{14}O_7$ Trimethylsaccharolactone (HAWORTH and LEITCH), 816.

$C_9H_{16}O_4$ β -Methyl- β -isopropylglutaric acid (KON and THORPE), 702.

9 III

$C_9H_8N_2Br$ 2- and 4-*p*-Bromobenzeneazoglyoxalines (FARGHER and PYMAN), 243.

C_9H_8NBr ω -Bromo-*m*-tolylacetonitrile (GOUGH and THORPE), 1161.

C_9H_8ON ω -Hydroxy-*m*-tolylacetonitrile (GOUGH and THORPE), 1162.

C_9H_9OCl β -Chlorohydratropic acid, preparation of (McKENZIE and WOOD), 835.

$C_9H_9ON_2$ Methyl bromotunginate (MANNING and NIERENSTEIN), 664.

$C_9H_9N_2Br$ 2-5'-Bromo-2'-aminoanilinyglyoxaline (FARGHER and PYMAN), 246.

$C_9H_{10}ON_2$ Base, from reduction of 5-benzeneazo-4-methylglyoxaline (FARGHER and PYMAN), 253.

$C_9H_{12}O_2N$ Imide of *cyclopentane*-1:1-diacetic acid (KON and THORPE), 700.

$C_9H_{10}ON_2$ *as*-Dibutylcarbamide (WERNER), 1014.

9 IV

$C_9H_{10}O_2NAS$ 6-Oxalylamino-*m*-tolylarsinic acid (FARGHER), 989.

$C_9H_{10}O_2NAS$ 5-Nitro-6-hydroxy-*m*-tolylarsinic acid (FARGHER), 990.

$C_9H_{12}O_2N_2As$ 2:7-Dimethyl-1:3-benzodiazole-5-arsinic acid (BAXTER and FARGHER), 1379.

$C_9H_{10}ONCl$ Dibutylcarbamyl chloride (WERNER), 1013.

C₁₀ Group.

$C_{10}H_8O_3$ Aldehyde, from hemlock tannin (MANNING and NIERENSTEIN), 668.

$C_{10}H_8O_4$ Acid, and its salts, from oxidation of aldehyde from hemlock tannin (MANNING and NIERENSTEIN), 668.

$C_{10}H_8S$ α -Naphthyl mercaptan, reaction of, with mercuric nitrite (RAY and GIBBA), 1150.

$C_{10}H_9N$ β -Naphthylamine, formation of diazoamino-compounds from (NOEMAN), 673.

$C_{10}H_{10}N_2$ Benzeneazo-4-methylglyoxalines (FARGHER and PYMAN), 249.

$C_{10}H_{12}O_3$ Ethyl *l* mandelate, catalytic racemisation of (McKENZIE and WOOD), 602.

$C_{10}H_{12}N_2$ 2-Amino-5-*p*-aminophenyl-4-methylglyoxaline, and its salts (FARGHER and PYMAN), 250.

$C_{10}H_{13}N$ Neomethylhydrazinamines, optically active, and their salts (HARRIS), 61.

$C_{10}H_{14}O_2$ Glycol *o*- and *o*-xylyl ethers (BOYD and THOMAS), 1243.

$C_{10}H_{14}N_2$ Nicotine, physical constants of (JERICOIT), 104.

$C_{10}H_{16}O_4$ 2-Methyl-*cyclopentane*-1:1-diacetic acid (KON and THORPE), 697.

10 III

$C_{10}H_8O_2N$ 4-Nitro-8-naphthol (MORGAN and EVENS), 1132.

$C_{10}H_8O_2N_2$ 2:4-Dinitro- α -naphthylamine, preparation of (MORGAN and EVENS), 1125.

$C_{10}H_8O_2N_2$ 2-Phenylglyoxaline-4-carboxylic acid (FARGHER and PYMAN), 1018.

$C_{10}H_8ON_2$ 2-Benzoylaminyglyoxaline (FARGHER and PYMAN), 248.
Glyoxaline-4-carboxyanilide (FARGHER and PYMAN), 228.

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10 III—11 III

- $C_{10}H_9O_2Br$ Acetyl derivative of bromotsuginic acid (MANNING and NIERENSTEIN), 664.
 $C_{10}H_9N_2Br$ 4-*p*-Bromobenzeneazo-2-methylglyoxaline (FARGHER and PYMAN), 256.
 $C_{10}H_{11}ON$ Base, from reduction of 5-benzeneazo-4-methylglyoxaline (FARGHER and PYMAN), 255.
 $C_{10}H_{11}O_2Br$ Ethyl bromotsuginate (MANNING and NIERENSTEIN), 664.

10 IV

- $C_{10}H_9ON_2S_2$ Substance, from chloroacetic acid and the potassium salt of 2-thiol-5-thio-4-phenyl-4:5-dihydro-1:3:4-thiodiazole (RAY, GUHA, and DAS), 1312.
 $C_{10}H_9N_2BrS_2$ Substance, from ethylene bromide and the potassium salt of 2-thiol-5-thio-4-phenyl-4:5-dihydro-1:3:4-thiodiazole (RAY, GUHA, and DAS), 1312.
 $C_{10}H_{11}O_2N_2As$ 3:4-Diacetylaminophenylarsinic acid (BAXTER and FARGHER), 1376.

C_{11} Group.

- $C_{11}H_9N$ Indenyl-3-acetonitrile (INGOLD and THORPE), 152.
 $C_{11}H_9O_4$ Ethyl ester of acid, from hemlock tannin (MANNING and NIERENSTEIN), 668.
 $C_{11}H_{11}N$ β -Naphthylmethylamine, preparation of (MORGAN and EVANS), 1140.
 $C_{11}H_{13}O_4$ β - α -Carboxy-*m*-tolylpropionic acid, and its salts (GOUGH and THORPE), 1164.
 $C_{11}H_{15}O_4$ 5-*cyclo*Hexanespirocyclopentan-3-one-1-carboxylic acid (INGOLD and THORPE), 364.
 $C_{11}H_{15}O_4$ *cyclo*Pentane-1:1-dimalonic acid (KON and THORPE), 700.
 $C_{11}H_{15}O_4$ Glycol mesityl ether (BOYD and THOMAS), 1243.
 $C_{11}H_{15}O_5$ 5-*cyclo*Hexanespirocyclopentan-3-one-1-carboxylic acid (INGOLD and THORPE), 372.
 $C_{11}H_{15}O_5$ 5-*cyclo*Hexanespirocyclopentan-3-ol-1-carboxylic acid (INGOLD and THORPE), 373.
 $C_{11}H_{15}O_4$ 2-Methyl*cyclo*hexane-1:1-diacetic acid, and its silver salt (KON and THORPE), 694.
 $C_{11}H_{18}N_2$ Tolylene-4-*N*-*n*-butyldiamines, and their hydrochlorides (REILLY and HICKINBOTTOM), 176.

11 III

- $C_{11}H_9O_2N$ 4-Nitro- β -naphthyl methyl ether (MORGAN and EVANS), 1133.
 $C_{11}H_{10}ON$ 1-Nitroso- β -naphthylmethylamine (MORGAN and EVANS), 1141.
 $C_{11}H_{11}ON$ 2-Methylglyoxaline-4-carboxyanilide (FARGHER and PYMAN), 230.
 $C_{11}H_{13}O_4N$ β - α -Cyano-*m*-tolylpropionic acid (GOUGH and THORPE), 1164.
 $C_{11}H_{13}O_2N_2$ ω -Imide- $\alpha\alpha'$ -dicyanocyclopentane-1:1-diacetic acid (KON and THORPE), 701.
 $C_{11}H_{11}O_2Cl$ Ethyl α -chlorocinnamates (WALKER and JAMES), 1247.
 $C_{11}H_{12}O_2N_2$ ω -Diimide of *cyclo*pentane-1:1-dimalonic acid (KON and THORPE), 699.
 $C_{11}H_{13}ON$ ω -Ethoxy-*m*-tolylacetoneitrile (GOUGH and THORPE), 1163.
 $C_{11}H_{13}O_2N_2$ ω -Imide of $\alpha\alpha'$ -dicyano- β -methyl- β -isopropylglutaric acid (KON and THORPE), 702.
 $C_{11}H_{14}O_2N_2$ ω -Diiminodiimide of *cyclo*pentane-1:1-dimalonic acid (+ $\frac{1}{2}H_2O$) (KON and THORPE), 698.

CXV.

$C_{11}H_{13}O_2N_3$ ω -Imide of $\alpha\alpha'$ -dicarbamylocyclopentane-1:1-diacetic acid (KON and THORPE), 701.

$C_1H_{11}O_2N$ Amide of cyclopentane-1:1-dimalonic acid (KON and THORPE), 699.

11 IV

$C_{11}H_9O_7NS$ 2-*p*-Sulphobenzeneazoglyoxaline-4:5-dicarboxylic acid (+ $2H_2O$), and its sodium salt (FARGHER and PYMAN), 258.

 C_{12} Group.

$C_{12}H_{10}$ Diphenyl, preparation of (KRIZEWSEKY and TURNER), 559.

12 II

$C_{12}H_{16}N_2$ Harman, preparation of, and its salts (PERKIN and ROBINSON), 971.

$C_{11}H_{11}N$ α -Indenyl-2- and -3-propionitriles (INGOLD and THORPE), 158.

$C_{12}H_{12}O_4$ 5-*cyclo*Hexanespiro α -cyclopentan-3-one-1:2-dicarboxylic anhydride (INGOLD and THORPE), 363.

$C_{12}H_{14}O_5$ Anhydride of 3-*cyclo*hexanespiro-1-methylcyclopropane-1:1':3-tricarboxylic acid (INGOLD and THORPE), 379.

5-*cyclo*Hexanespiro α -cyclopentan-3-one-1:2-dicarboxylic acid (INGOLD and THORPE), 362.

cis-3-Hydroxy-4-*cyclo*hexylcyclobutan-2-one-3:4-dicarboxylic anhydride (INGOLD and THORPE), 366.

$C_{11}H_{14}O_7$ Ethyl dihydrogen 5:5-dimethyldicyclopentan-3-one-1:2:4-tricarboxylate (INGOLD and THORPE), 388.

$C_{12}H_{16}O_6$ 3-*cyclo*Hexanespiro-1-methylcyclopropane-1:1':2-tricarboxylic acid (INGOLD and THORPE), 379.

cis- and *trans*-3-Hydroxy-4-*cyclo*hexylcyclobutan-2-one-3:4-dicarboxylic acids, and their salts (INGOLD and THORPE), 364.

$C_{12}H_{16}O_3$ 2:4-Dimethylcyclohexane-1:1-diacetic anhydride (KON and THORPE), 696.

$C_{12}H_{20}O_4$ 2:4-Dimethylcyclohexane-1:1-diacetic acid (KON and THORPE), 696.

$C_{12}H_{22}O_{11}$ Maltose, constitution of (IRVING and DICK), 593; (HAWORTH and LEITCH), 899.

12 III

$C_{12}H_8O_2N$ ψ -1:8-*iso*Naphthoxazones, and their salts (DEY and GOSWAMI), 531.

$C_{12}H_8O_2N$ Indenyl-2- and -3-cyanoacetic acids (INGOLD and THORPE), 151.

$C_{12}H_8O_2N_3$ 5-Nitrophenol-2-azoresorcinol (MORGAN and EVENS), 1137.

$C_{12}H_{10}O_2N_2$ *N*-Nitroso-5:6:7:8-tetrahydro- ψ -1:8-*iso*naphthoxazone (DEY and GOSWAMI), 539.

$C_{12}H_{10}O_2N$ 5:6:7:8-Tetrahydro- ψ -1:8-*iso*naphthoxazone (DEY and GOSWAMI), 538.

$C_{12}H_{14}O_2Cl$ Allyl α -chlorocinnamates (WALKER and JAMES), 1217.

$C_{12}H_{14}O_2As$ *pp'*-Dihydroxydiphenylarsinic acid (FARGHER), 986.

$C_{12}H_{12}O_2N_2$ Ethyl 2-phenylglyoxaline-4-carboxylate (FARGHER and PYMAN), 1019.

$C_{12}H_{12}N_2Se_2$ Di-*m*-aminophenyl diselenide, and its hydrochloride (PYMAN), 171.

$C_{12}H_{15}ON_3$ 2-Ethylglyoxaline-4-carboxyanilide (FARGHER and PYMAN), 1017.

$C_{12}H_{14}O_2N_3$ ω -Imide of $\alpha\alpha'$ -dicyano-2-methylcyclopentane-1:1-diacetic acid (KON and THORPE), 697.

$C_{12}H_{15}O_2N_3$ ω -Imide of $\alpha\alpha'$ -dicyano- β -methyl- β -butylglutaric acid (KON and THORPE), 702.

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12 III—13 III

$C_{12}H_{17}ON_2$ Benzyl isopropyl ketone semicarbazone (KON and THORPE), 708.

$C_{12}H_{15}O_2N_2$ Semicarbazone of 5-cyclohexanespiro[di]cyclopentan-3-one-1-carboxylic acid (INGOLD and THORPE), 364.

$C_{12}H_{15}O_2N_2$ Semicarbazone of 5-cyclohexanespiro[di]cyclopentan-3-one-1-carboxylic acid (INGOLD and THORPE), 373.

12 IV

$C_{12}H_9O_2N_2Se_2$ Di-m-nitrophenyl diselenide (PYMAN), 170.

$C_{12}H_9O_2N_2As$ 3:3'-Dinitro-4:4'-dihydroxydiphenylarsinic acid (FARGHER), 986.

$C_{12}H_{11}O_2N_2As$ 3:3'-Dinitro-4:4'-diaminodiphenylarsinic acid (FARGHER), 989.

12 V

$C_{12}H_{11}O_2N_2ClAs$ 3:3'-Diamino-4:4'-dihydroxydiphenylarsenious chloride, dihydrochloride of (FARGHER), 987.

C_{13} Group.

$C_{13}H_{13}N$ α -Indenyl-3-n-butyronitrile (INGOLD and THORPE), 154.

$C_{13}H_{15}O_2$ *o*- and *p*-Hydroxybenzylidenemesityl oxide (GHOSH), 298.

$C_{13}H_{15}O_2$ *cis*-3-Hydroxy-4-cyclohexyl-1-methylcyclobutan-2-one-3:4-dicarboxylic anhydride (INGOLD and THORPE), 372.

cis-Lactonic anhydride from γ -hydroxy- β -cyclohexyl- α -methyltricarballic acid (INGOLD and THORPE), 371.

$C_{13}H_{15}O_2$ 5-cyclohexanespiro-2-ethylcyclopentan-3-one-1-carboxylic acid (INGOLD and THORPE), 379.

$C_{13}H_{15}O_4$ *cis*- and *trans*-3-Hydroxy-4-cyclohexyl-1-methylcyclobutan-2-one-3:4-dicarboxylic acids (INGOLD and THORPE), 371.

cis- and *trans*-Lactonic acids from γ -hydroxy- β -cyclohexyl- α -methyltricarballic acid, and their silver salts (INGOLD and THORPE), 368.

$C_{13}H_{15}N_3$ 2:5-Dimethyl-1-n-butylbenzimidazole, and its picrate (REILLY and HICKINBOTTOM), 178.

$C_{13}H_{21}O_4$ Acetyl derivative of 5-cyclohexanespiro[di]cyclopentan-3-ol-1-carboxylic acid (INGOLD and THORPE), 374.

$C_{13}H_{21}O_4$ *cis*- and *trans*- γ -Hydroxy- β -cyclohexyl- α -methyltricarballic acids, barium salts (INGOLD and THORPE), 369.

13 III

$C_{13}H_9O_2N$ 6-Nitro-1:2- α -naphthapyrone (DEV and GOSWAMI), 540.

$C_{13}H_9O_2N_2$ Quinolinanil (GHOSH), 1103.

$C_{13}H_9O_2N_2$ 9-Methyl ψ -1:8-isonaphthoxazone, and its salts (DEV and GOSWAMI), 539.

$C_{13}H_9O_2N_2$ Quinolinylphenylhydrazine (GHOSH), 1103.

$C_{13}H_{12}ON_2$ Harmine, and its salts (PERKIN and ROBINSON), 946.

Methylnorharmine (PERKIN and ROBINSON), 951.

$C_{13}H_9O_2N_4$ Nitroso-5:6:7:8-tetrahydro-9-methyl- ψ -1:8-isonaphthoxazone (DEV and GOSWAMI), 539.

$C_{13}H_{13}ON$ Aceto- β -naphthylmethylamide (MORGAN and EVANS), 1143.

$C_{13}H_{13}O_2N$ 5:6:7:8-Tetrahydro-9-methyl- ψ -1:8-isonaphthoxazone (DEV and GOSWAMI), 539.

$C_{13}H_{13}ON_2$ Harmaline, and its salts (PERKIN and ROBINSON), 951.

$C_{13}H_{13}O_2N_2$ Ketoisonormethyltetrahydroharmine (PERKIN and ROBINSON), 959.

$C_{13}H_{13}O_2N_4$ 2-Acetylamino-4-*p*-acetylamino-phenylglyoxaline, and its hydrochloride (FARGHER and PYMAN), 240.

- $C_{15}H_{15}O_4N_2$ ω -Imide of $\alpha\alpha'$ -dicyano-2-methylcyclohexane-1:1-diacetic acid (KON and THORPE), 694.
 $C_{15}H_{15}O_4N_2$ ω -Imide of $\alpha\alpha'$ -dicarbamyl-2-methylcyclohexane-1:1-diacetic acid (KON and THORPE), 694.
 $C_{15}H_{20}ON_2$ 4-Acetyltolylene-4-*N*-n-butylidiamines (REILLY and HICKINBOTTOM), 176.
 $C_{15}H_{11}O_4N$ Meteloidine, and its salts (KING), 501.
 $C_{15}H_{23}ON_2$ Tributylcarbamide (WERNER), 1013.

13 IV

- $C_{15}H_{10}O_2NI$ ψ -1:3-*iso*Naphthoxazone-*N*-methiodide (DRY and GOSWAMI), 538.

 C_{14} Group.

- $C_{14}H_8O_2$ Phenanthraquinone, basic properties of (KNOX and WILL), 850.
 $C_{14}H_{12}O$ Deoxybenzoin, condensation of aldehydes with (DAS and GHOSH), 817; (SINGH and MAZUMDER), 821.
 $C_{14}H_{11}N$ α -Indenyl-3-allylacetonitrile (INGOLD and THORPE), 155.
 $C_{14}H_{11}O$ Piperonylideneemesityl oxide (GHOSH), 293.
 $C_{14}H_{11}N$ α -Indenyl-3-*n*-valeronitrile (INGOLD and THORPE), 154.
 $C_{14}H_{12}N_2$ Diphenylethylenediamine, preparation of, and its sulphate (BENNETT), 576.
 $C_{14}H_{10}O_5$ Anhydride of *cis*-lactonic acid, $C_{14}H_{20}O_8$ (INGOLD and THORPE), 382.
 Ethyl hydrogen 5-cyclohexanespirodiacyclopentan-3-one-1:4-dicarboxylate (INGOLD and THORPE), 361.
 $C_{14}H_{16}O_6$ *cis*- and *trans*-Lactonic acids from γ -hydroxy-8-cyclohexylethyltricarballic acid, and their silver salts (INGOLD and THORPE), 380.
 $C_{14}H_{22}O_7$ *cis*- and *trans*- γ -Hydroxy-8-cyclohexyl- α -ethyltricarballic acids, and their barium salts (INGOLD and THORPE), 381.

14 III

- $C_{14}H_8O_4N_2$ 2:4:6:2':4':6'-Hexanitrodiphenylethylenedinitroamine (BENNETT), 577.
 $C_{14}H_8ON_2$ Phenylphthalalazone, preparation of (MITTER and SEN), 1147.
 $C_{14}H_{10}O_2N_2$ Phenylazophthalide (MITTER and SEN), 1147.
 $C_{14}H_{10}O_2N_2$ Hexanitrodiphenylethylenediamine (BENNETT), 578.
 $C_{14}H_{10}N_4As_2$ 5:5'-Arseno-1:3:1':3'-benzodiazole, and its dihydrochloride (BAXTER and FARGHER), 1376.
 $C_{14}H_{10}ON$ 4:9-Dimethyl- ψ -1:8-*iso*naphthoxazone, and its salts (DRY and GOSWAMI), 539.
 $C_{14}H_{10}ON_2$ Phthalaldehydic acid phenylhydrazone (MITTER and SEN), 1146.
 $C_{14}H_{10}ON$ Ethyl indenyl-2- and -3-cyanoacetates (INGOLD and THORPE), 150.
 $C_{14}H_{11}ON_2$ Methylharmin, and its salts (PERKIN and ROBINSON), 947.
 $C_{14}H_{10}ON_2$ Nitroso-5:6:7:8-tetrahydro-4:9-dimethyl- ψ -1:8-*iso*naphthoxazone (DRY and GOSWAMI), 540.
 $C_{14}H_{10}ON$ 5:6:7:8-Tetrahydro-4:9-dimethyl- ψ -1:8-*iso*naphthoxazone (DRY and GOSWAMI), 540.
 $C_{14}H_{15}O_2N_2$ 2-Acetyl-amino-5-*p*-acetylaminophenyl-4-methylglyoxaline and its hydrochloride (FARGHER and PYMAN), 251.

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14 III—16 III

$C_{14}H_{17}O_2N_2$ ω -Imide o. $\alpha\alpha'$ -dicyano-2:4-dimethylcyclohexane-1:1-diacetic acid (KON and THORPE), 695.

$C_{14}H_{18}ON_2$ Methyltetrahydroharmine, and its salts (PERKIN and ROBINSON) 953.

14 IV

$C_{14}H_{16}O_2N_2As_2$ 1:2:1':2'-Tetrahydro-4-arsenobenzodioxazolone (FARGHER), 991.

$C_{14}H_{15}O_2NI$ ψ -1:8-*iso* Naphthoxazone-*N*-ethiodide (DEX and GOSWAMI), 538.

$C_{14}H_{17}O_2N_2S$ Harmine methohydroxide sulphonic anhydride (PERKIN and ROBINSON), 950.

$C_{14}H_{16}O_2N_2As_2$ 4:4'-Dihydroxy-5:5'-diamino-3:3'-dimethylarsenobenzene, hydrochloride of (+ $2H_2O$), (FARGHER), 990.

$C_{14}H_{15}O_2N_2S$ Harmaline methohydroxide sulphonic anhydride (PERKIN and ROBINSON), 953.

C_{15} Group.

$C_{15}H_{17}O$ Cinnamylidenemesityl oxide (GROSH), 299.

$C_{15}H_{17}O_6$ Anhydro-ester from ethyl dihydrogen cyclohexanespirodiaclopentan-3-one-1:2:4-tricarboxylate (INGOLD and THORPE), 361.

$C_{15}H_{17}O_6$ Ethyl dihydrogen cyclohexanespirodiaclopentan-3-one-1:2:4-tricarboxylate (INGOLD and THORPE), 360.

15 III

$C_{15}H_{15}O_2N_2$ Phenylphthalazonecarboxylic acid (MITTER and SEN), 1148.

$C_{15}H_{13}N_4Br$ 2-Phenyl-4-*p*-bromobenzeneazoglyoxaline (FARGHER and PYMAN), 256.

$C_{15}H_{15}O_2N_4$ Phthalonic acid phenylhydrazone (MITTER and SEN), 1147.

$C_{15}H_{15}O_2N_3$ ω -Imide of $\alpha\alpha'$ -dicyano- β -benzyl- β -methylglutaric acid (KON and THORPE), 704.

$C_{15}H_{13}N_4Br$ Base, from reduction of 2-phenyl-4-*p*-bromobenzeneazoglyoxaline (FARGHER and PYMAN), 257.

$C_{15}H_{15}ON$ Ethyl α -indenyl-2- and -2- α -cyanopropionates (INGOLD and THORPE), 152.

$C_{15}H_{16}ON$ cycloPentane-1:1-diacetic semianilide (KON and THORPE), 701.

$C_{15}H_{25}ON_2$ Dehydro-*iso* methyltetrahydroharmine methohydroxide, and its salts (PERKIN and ROBINSON), 957.

$C_{15}H_{21}O_2N_2$ 3:4-Diacetyltolylene-4-*N*-*n*-butylamine (REILLY and HICKIN-BOTTOM), 177.

$C_{15}H_{25}O_4N$ Ethyl α -cyano- γ -methylbutane- $\alpha\beta\beta$ -tricarboxylate (THORPE), 683.

15 IV

$C_{15}H_{15}O_2NBr$ ψ -1:8-*iso* Naphthoxazone *N*-allyl bromide (DEX and GOSWAMI), 538.

C_{16} Group.

$C_{16}H_{14}N_4$ 2:5-Bisbenzeneazo-4-methylglyoxaline (FARGHER and PYMAN), 250.

$C_{16}H_{18}N_2$ Camphanoquininoxaline, and its optical activity (SINGH and MAZUMDER), 574.

16 III

$C_{16}H_{16}O_2N$ ψ -Benzo-1:8-*iso* naphthoxazone (DEX and GOSWAMI), 540.

$C_{16}H_{16}O_2N_2$ Azotrinetro- β -naphthol (MORGAN and EVENS), 1135.

$C_{16}H_{16}O_2N_4$ *p*-Nitrobenzene-1-azo-4-nitro- β -naphthol (MORGAN and EVENS), 1134.

$C_{16}H_{16}O_6N_4$ Azodinitro- β -naphthol (MORGAN and EVENS), 1135.

- $C_{16}H_{10}N_2Cl_3$ *s*-Trichlorobenzeneazo- β -naphthylamine (NORMAN), 678.
 $C_{16}H_{11}O_3N_3$ Benzene-1-azo-4-nitro- β -naphthol (MORGAN and EVANS), 1134.
 $C_{16}H_{11}O_3N_3$ 4-Nitro- β -naphthol-1-azoresorcinol (MORGAN and EVANS), 1131.
 $C_{16}H_{12}N_2Cl$ *o*-Chlorobenzeneazo- β -naphthylamine (NORMAN), 675.
 β -Naphthalenediazoamino-*o*-chlorobenzene (NORMAN), 676.
 $C_{16}H_{13}ON_3$ 2-Phenylglyoxaline-4-carboxyanilide (FARGHER and PYMAN), 1018.
 $C_{16}H_{14}O_2N_2$ Phenylhydrazone of aldehyde, from hemlock tannin (MANNING and NIERENSTEIN), 668.
 $C_{16}H_{14}N_4As_2$ Dimethyl-5:5'-arseno-1:3:1':3'-benzodiazoles, and their dihydrochlorides (BAXTER and FARGHER), 1377.
 $C_{16}H_{15}O_3N_3$ ω -Imide of $\alpha\alpha'$ -dicyano- β -benzyl- β -ethylglutaric acid (Kox and THORPE), 704.
 $C_{16}H_{15}O_2N$ Ethyl α -indenyl-3- α -cyano-*n*-butyrate (INGOLD and THORPE), 153.
 $C_{16}H_{15}O_3N_3$ ω -Imide- $\alpha\alpha'$ -dicyano-2-methyl-5-isopropylidenecyclohexane-1:1-diacetic acid (Kox and THORPE), 696.
 $C_{16}H_{15}O_2N$ Ethyl ω -cyano-*m*-methylbenzylmalonate (GOUGH and THORPE), 1183.
 $C_{16}H_{14}O_3N_2$ *iso*Methyltetrahydroharmin methohydroxide methyl ether (PERKIN and ROBINSON), 955.

16 IV

- $C_{16}H_{13}O_2N_2As$ *pp'*-Dioxalylaminodiphenylarsinic acid (FARGHER), 938.
 $C_{16}H_{16}O_2NI$ 4:1:3-*iso*-Naphthoxazone *N-n*-butyl iodide (DEY and GOSWAMI), 533.
 $C_{16}H_{15}O_2N_2Se_2$ Di-*o*-acetylaminophenyl diselenide (PYMAN), 172.
 $C_{16}H_{15}ONCl$ Chlorophenyliminocamphors, and their optical activity (SINGH and MAZUMBER), 572.
 $C_{16}H_{15}ONBr$ Bromophenyliminocamphors, and their optical activity (SINGH and MAZUMBER), 570.
 $C_{16}H_{15}ONCl$ *o*- and *m*-Chlorophenylaminocamphor (FORSTER and SPINSTER), 892.

C₁₇ Group.

- $C_{17}H_{15}N_3$ Benzeneazo- β -naphthylmethylamine (MORGAN and EVANS), 1142.
 $C_{17}H_{16}N_4$ 2-Amino-5-*p*-benzylideneaminophenyl-4-methylglyoxaline, and its acetate (FARGHER and PYMAN), 252.
 $C_{17}H_{15}O_2$ Di-ethyl hydrogen cyclohexanespirodi-cyclopentan-3-one-1:2:4-tricarboxylate, and its potassium salt (INGOLD and THORPE), 360.

17 III

- $C_{17}H_{11}O_2N$ 4-Methyl-4-benzo-1:8-*iso*naphthoxazone (DEY and GOSWAMI), 540.
 $C_{17}H_{15}O_2N_4$ 2:4-Dinitrophenylnitro- β -naphthylmethylamine (MORGAN and EVANS), 1145.
 $C_{17}H_{15}O_2N_3$ 2:4-Dinitrophenyl- β -naphthylmethylamine (MORGAN and EVANS), 1144.
 $C_{17}H_{11}O_2N_4$ *p*-Nitrobenzene-1-azo- β -naphthylmethylamine (MORGAN and EVANS), 1143.
 Nitrotolueneazo- β -naphthylamines (NORMAN), 678.
 $C_{17}H_{14}N_2Br$ Bromo-*o*- and *p*-tolueneazo- β -naphthylamines (NORMAN), 676.
 β -Naphthalenediazoaminobromotoluenes (NORMAN), 676.
 $C_{17}H_{15}O_2N$ Ethyl α -indenyl-3- α -cyanoallylacetate (INGOLD and THORPE), 155.

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17 III—19 II

- $C_{17}H_{17}O_2N_2$ ω -Imide of $\alpha\alpha'$ -diethano- β -methyl- β -(α -n-azylethyl) glutaric acid (KON and THORPE), 703.
 $C_{17}H_{15}ON$ Glycol o -xylyl ether p -nitrobenzoate (BOYD and THOMAS), 1243.
 $C_{17}H_{15}O_2N$ Ethyl α -indenyl-3- α -cyano- n - and - iso -valerates (INGOLD and THORPE), 154.
 $C_{17}H_{15}O_2N$ m - and p -Carboxyphenyliminocamphor (FORSTER and SPINNER), 892.
 $C_{17}H_{15}ON$ Tolyiminocamphors, and their optical activity (SINGH and MAZUMDER), 568.
 $C_{17}H_{15}O_2N$ o -Methoxyphenyliminocamphor, and its optical activity (SINGH and MAZUMDER), 575.
 $C_{17}H_{15}O_2N$ m - and p -Carboxyphenylaminocamphor (FORSTER and SPINNER), 893.
 $C_{17}H_{15}O_2N$ Hyoscine, stereochemistry of, and its salts (KING), 476, 974.
 $C_{17}H_{15}O_2N_2$ iso -Methyltetrahydroharminemethohydroxide ethyl ether (PERKIN and ROBINSON), 956.

17 IV

- $C_{17}H_{15}O_2NS$ Toluene- p -sulphon-2:4- $dinitro$ - α -naphthylamide (MORGAN and EVENS), 1130.
 $C_{17}H_{15}O_2NI$ ψ -1:8- iso -Naphthoxazone N -amyl iodide (DEY and GOSWAMI), 538.

C_{18} Group.

- $C_{18}H_{17}N$ Benzyl- β -naphthylmethylamine (MORGAN and EVANS), 1144.
 $C_{18}H_{17}N_2$ 2- β -Naphthalenediazoamino- p -xylene (NORMAN), 677.
 m - and p -Xyleneazo- β -naphthylamines (NORMAN), 674.
 $C_{18}H_{21}O_4$ n -Heptyl tartrate, and its rotation dispersion (FRANKLAND and GARNER), 655.

18 III

- $C_{18}H_{15}ON$ Benzo- β -naphthylmethylamide (MORGAN and EVANS), 1144.
 $C_{18}H_{15}N_4As_2$ 2:7:2':7'-Tetramethyl-5:5'-arseno-1:3:1':3'-benzodiazole, and its dihydrochloride (BAXTER and FARGHER), 1379.
 $C_{18}H_{19}O_4N$ Anil from cis -3-hydroxy-4- $cyclohexylcyclobutan$ -2-one-3:4-dicarboxylic acid (INGOLD and THORPE), 367.
 $C_{18}H_{21}ON$ Ethyl α -indenyl-3- α -cyano- iso -hexoate (INGOLD and THORPE), 156.
 $C_{18}H_{17}O_4N$ Anilic acid from cis -3-hydroxy-4- $cyclohexylcyclobutan$ -2-one-3:4-dicarboxylic acid (INGOLD and THORPE), 366.
 $C_{18}H_{21}O_2N_2$ p -Acetylaminophenyliminocamphor (FORSTER and SPINNER), 893.
 $C_{18}H_{25}O_3N$ 2:4-Dimethyl- $cyclohexane$ -1:1-diacetic semianilide (KON and THORPE), 696.
 $C_{18}H_{27}O_3N$ Capsaicin (LAPWORTH and ROYLE) 1109.

18 IV

- $C_{18}H_{12}ON_2Cl_2$ Acetyl derivative of s -trichlorobenzeneazo- β -naphthylamine (NORMAN), 678.
 $C_{18}H_{14}ON_2Cl$ Acetyl derivative of o -chlorobenzeneazo- β -naphthylamine (NORMAN), 675.

C_{19} Group.

- $C_{19}H_{21}O_4$ Dihydrocryptopidenic acid (PERKIN), 764.
 $C_{19}H_{29}O_7$ Ethyl- $cyclohexane$ - $spiro$ - $cyclopentan$ -3-one-1:2:4-tricarboxylate, and its sodium salt (INGOLD and THORPE), 358.

19 III

- $C_{19}H_{11}O_2N$ Resorcinolquinolinein, and its silver salt (GHOSH), 1103.
 $C_{19}H_{11}O_2N$ Phloroglucinolquinolinein (GHOSH), 1104.
 $C_{19}H_{11}O_2N_4$ *m*-Phenylenediaminequinolinein (GHOSH), 1104.
 $C_{19}H_{11}O_2N_4$ 2:4-Diaminophenolquinolinein (GHOSH), 1105.
 $C_{19}H_{15}O_2N$ Benzoyl derivative of 5:6:7:8-tetrahydro- ψ -1:8-isonaphthoxazone (DEY and GOSWAMI), 539.
 $C_{19}H_{17}O_2N_2$ Acetyl derivatives of nitrotolueneazo- β -naphthylamines (NORMAN), 678.
 $C_{19}H_{15}O_2N_3$ *p*-Nitrobenzeneazotetrahydroharmine (PERKIN and ROBINSON), 963.
 $C_{19}H_{23}O_2N$ Ethyl α -indenyl-3- α -cyanoisocaproate (INGOLD and THORPE), 156.
 $C_{19}H_{22}O_2N$ Porphyrroxine, and its salts (RAKSHIT), 455.
 $C_{19}H_{23}O_2N$ Methylecapsaicin (LAPWORTH and ROYLE), 1113.

19 IV

- $C_{19}H_{17}O_2NCl$ ψ -1:8-isonaphthoxazone *N*-benzyl chloride (DEY and GOSWAMI), 538.
 $C_{19}H_{15}ON_2Br$ Acetyl derivatives of bromotolueneazo- β -naphthylamines (NORMAN), 676.
 $C_{19}H_{23}O_2N_2S$ Benzeneazotetrahydroharmine-sulphonic acid (PERKIN and ROBINSON), 964.

 C_{20} Group.

- $C_{20}H_{15}O_4$ Dioxy- ψ -cryptopidine (PERKIN), 773.
 $C_{20}H_{15}O_4$ Trioxy- ψ -cryptopidine (PERKIN), 773.
 $C_{20}H_{23}O_4$ *iso*- ψ -Berberidine (PERKIN), 778.
 Cryptopidenes (PERKIN), 744, 772, 776, 786.
 $C_{20}H_{23}O_5$ Hydroxycryptopidine (PERKIN), 742.
 Ketodihydrocryptopidenes (PERKIN), 763, 777.
 $C_{20}H_{23}O_5$ Ketohydroxydihydroisocryptopidenic acid (PERKIN), 790.
 $C_{20}H_{23}O_4$ Dihydrocryptopidine (PERKIN), 762.
 $C_{20}H_{23}O_5$ Dihydro- α -isocryptopidol (PERKIN), 758.
 $C_{20}H_{23}O_4$ Tetrahydrocryptopidine (PERKIN), 744.
 $C_{20}H_{23}O_6$ Ethyl cyclohexanespiro-2-methylidicyclopentan-3-one-1:2,4,5-carboxylate (INGOLD and THORPE), 368.
 $C_{20}H_{25}O_{11}$ Heptamethylmethylmaltoside (HAWORTH and LEITCH), 814.

20 III

- $C_{20}H_{15}ON_2$ Acetyl derivatives of xyleneazo- β -naphthylamines (NORMAN), 674.
 $C_{20}H_{15}ON$ α - and β -Naphthyliminocamphors, and their optical activity (SINGH and MAZUMDER), 873.
 $C_{20}H_{23}ON$ α - and β -Naphthylaminocamphor (FORSTER and SPINNER), 891.

20 IV

- $C_{20}H_{17}O_2NBr$ ψ -1:8-isonaphthoxazone *N*-phenylacetyl bromide (DEY and GOSWAMI), 538.
 $C_{20}H_{23}O_2N_2S$ Benzeneazomethyltetrahydroharmine-sulphonic acid (PERKIN and ROBINSON), 965.

 C_{21} Group.

- $C_{21}H_{15}O_4$ *p*-Hydroxybenzylidenedeoxybenzoin (SINGH and MAZUMDER), 824.
 Salicylidenedeoxybenzoin (SINGH and MAZUMDER), 822.

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21 II—22 III

- $C_{21}H_{16}N_4$ 2:4:5-Trisbenzeneazoglyoxaline (FARGHER and PYMAN), 237.
 $C_{21}H_{20}O_6$ Curcumin (GHOSH), 292.
 $C_{21}H_{32}O_8$ Ethyl cyclohexanespiro-1-methylcyclopropane-1:1':1'':2-tetracarb-
 oxylate (INGOLD and THORPE), 357.

21 III

- $C_{21}H_{15}ON$ 4-Hydroxy-2:3-diphenylquinoline (SINGH and MAZUMDER),
 823.
 $C_{21}H_{17}OCl$ 2:3-Diphenylbenzopyryronium chloride (DAS and GHOSH), 819;
 (SINGH and MAZUMDER), 822.
 $C_{21}H_{19}O_2Br$ Bromocurcumin (GHOSH), 295.
 $C_{21}H_{21}O_2N_2$ *m*-Dimethylaminophenolquinolinein (GHOSH), 1105.
 $C_{21}H_{21}O_2N$ Anhydrocryptopines, and their salts (PERKIN), 736, 780.
 $C_{21}H_{21}O_2N_2$ Disemicarbazone of trioxo- ψ -cryptopidine (PERKIN), 773.
 $C_{21}H_{23}O_2N$ ψ -Anhydrodihydrocryptopine, and its salts (PERKIN), 769.
 $C_{21}H_{23}O_2N$ Cryptopine (PERKIN), 713.
 $C_{21}H_{23}O_2N_2$ Semicarbazones of ketodihydrocryptopidenes (PERKIN),
 764, 777.
 $C_{21}H_{23}O_2N$ Dihydroanhydro- ψ -cryptopine, and its pierate (PERKIN), 775.
 $C_{21}H_{23}O_2N$ Dihydroanhydrodihydrocryptopine, and its salts (PERKIN), 754.
 $C_{21}H_{23}O_2N$ Dihydroanhydro- ψ -methylberberine, and its salts (PERKIN), 779.
 $C_{21}H_{23}O_2N$ Tetrahydroanhydroisocryptopine, and its salts (PERKIN), 751.

21 IV

- $C_{21}H_{15}O_2N_2As$ 4-Methylphenanthraphenazine-2-arsinic acid (BAXTER
 and FARGHER), 1378.
 $C_{21}H_{15}O_2N_2Br$ Triacetyl derivative of base, $C_{18}H_{13}N_2Br$ (FARGHER and PY-
 MAN), 258.
 $C_{21}H_{22}O_2NCl$ ψ -Cryptopine chloride (PERKIN), 766.
 $C_{21}H_{22}O_2NBr$ ψ -Cryptopine bromide (PERKIN), 767.
 $C_{21}H_{22}O_2NI$ ψ -Cryptopine iodide (PERKIN), 768.
 $C_{21}H_{22}O_2NS$ ψ -Cryptopine hydrogen sulphate (PERKIN), 768.

C_{22} Group.

- $C_{22}H_{16}O_3$ Vanillylidenedeoxybenzoïn (SINGH and MAZUMDER), 824.
 $C_{22}H_{18}O_2$ Divanillylidene mesityl oxide (GHOSH), 299.

22 III

- $C_{22}H_{23}O_2N$ *p*-Benzeneazophenyliminocamphor, and its optical activity,
 (SINGH and MAZUMDER), 574.
 $C_{22}H_{23}ON_2$ *p*-Benzeneazophenylaminocamphor (FORSTER and SPINNER),
 894.
 $C_{22}H_{25}O_2N$ Dihydroanhydromethyleryptopine, and its salts (PERKIN),
 740.
 $C_{22}H_{25}O_2N$ *n*- and ψ -Dihydromethylisocryptopines, and their salts (PERKIN),
 782.
 $C_{22}H_{25}O_2N$ Dioxymethylisocryptopine (PERKIN), 739.
 $C_{22}H_{25}O_2N$ Anhydrotetrahydromethyleryptopine (PERKIN), 752.
 $C_{22}H_{25}O_2N$ Dihydroisocryptopine (PERKIN), 757.
 $C_{22}H_{25}O_2N$ Tetrahydromethylisocryptopine (PERKIN), 788.
 $C_{22}H_{25}O_2N$ Tetrahydroanhydromethyleryptopine, and its platinumchloride (PERKIN),
 744.
 $C_{22}H_{25}O_2N$ Dihydromethyleryptopine (PERKIN), 746.

$C_{21}H_{20}O_2N$ Dihydroanhydrotetrahydromethyleryptopine, and its salts (PERKIN), 760.

C_{23} Group.

$C_{23}H_{18}O$ Cinuamylidenedeoxybenzoin, and its hydrochloride (SINGH and MAZUMDER), 825.

$C_{23}H_{28}O_{15}$ Dryophantin (NIRENSTEIN), 1330.

23 III

$C_{23}H_{18}N_2S_4$ Substance, from benzylidene chloride and the potassium salt of 2-thiol-5-thio-4-phenyl-4:5-dihydro-1:3:4-thiodiazole (RAY, GUHA, and DAS), 1311.

$C_{23}H_{19}O_2N$ Ethyl 2:3'-di-indenyl-3-cyanoacetate (INGOLD and THORPE), 151.

$C_{23}H_{25}ON$ *p*-Dimethylaminobenzylidenedeoxybenzoin (SINGH and MAZUMDER), 825.

$C_{23}H_{25}O_4Br_4$ Dibromodimethyleurcumin tetrabromide (GHOSH), 296.

$C_{23}H_{25}O_4Br$ Bromodimethyleurcumin (GHOSH), 296.

23 IV

$C_{23}H_{17}ON_2Cl$ Benzoyl derivative of *o*-chlorobenzeneazo- β -naphthylamine (NORMAN), 675.

C_{24} Group.

$C_{24}H_{26}N_2$ Couess ne, and its hydrogen oxalate (PYMAN), 164.

24 III

$C_{24}H_{17}O_2N_4$ Benzoyl derivatives of nitrotolueneazo- β -naphthylamine (NORMAN), 678.

$C_{24}H_{25}ON_2$ Holarrhenine, and its hydrobromide (PYMAN), 165.

24 IV

$C_{24}H_{17}ON_2Br$ Benzoyl derivatives of bromotolueneazo- β -naphthylamine (NORMAN), 676.

$C_{24}H_{17}O_4N_4As_2$ 3:3':3'':3'''-Tetra-amino-4:4':4'':4'''-tetrahydroxytetraphenyldiarsine, tetrahydrochloride of (FARGHER), 987.

C_{25} Group.

$C_{25}H_{18}N_2S_4$ Substance, from bromoform or iodoform and the potassium salt of 2-thiol-5-thio-4-phenyl-4:5-dihydro-1:3:4-thiodiazole (RAY, GUHA, and DAS), 1309.

$C_{25}H_{17}OCl$ 2:3-Diphenylnaphthapyryonium chloride (SINGH and MAZUMDER), 823.

$C_{25}H_{21}ON_2$ Benzoyl derivatives of xyleneazo- β -naphthylamines (NORMAN), 674.

$C_{25}H_{22}O_4Br_4$ Dibromodiacetylcucurcumin tetrabromide (GHOSH), 296.

$C_{25}H_{22}O_4Br$ Bromodiacetylcucurcumin (GHOSH), 296.

$C_{25}H_{25}O_3N$ Dihydrocryptopidenic anilide (PERKIN), 764.

25 IV

$C_{25}H_{19}O_2N_2S_4$ Substance, from chloropicrin and the potassium salt of 2-thiol-5-thio-4-phenyl-4:5-dihydro-1:3:4-thiodiazole (RAY, GUHA, and DAS), 1311.

C_{26} Group.

$C_{26}H_{31}O_2N_2$ *m*-Phenylenebisiminocamphor, and its optical activity (SINGH and MAZUMDER), 575.

$C_{26}H_{40}O_2N_2$ Acetylholarrhenine (PYMAN), 165.

C₂₇ Group.

C₂₇H₄₈O₁₀ Dicarbethoxyisocurcumin (GHOSH), 297.

27 III

C₂₇H₃₈O₁₀Br₄ Dibromodicarbethoxycurcumin tetrabromide (GHOSH), 296.

C₂₇H₃₇O₁₀Br Bromodicarbethoxycurcumin (GHOSH), 295.

C₂₇H₃₇O₁₀Br₃ Bromodicarbethoxycurcumin tetrabromide (GHOSH), 295.

C₂₈ Group.

C₂₈H₃₄O₄ Benzylidenecurcumin (GHOSH), 294.

C₂₉ Group.

C₂₉H₃₈O₂N₂ Substance, from curcumin and nitrosodimethylaniline (GHOSH), 294.

C₃₀ Group.

C₃₀H₁₈O₂N₂S₂ Substance, from tribromorescinol and the potassium salt of 2-thiol-5-thio-4-phenyl-4:5-dihydro-1:3:4-thiadiazole (RAY, GUHA, and DAS), 1311.

C₃₂ Group.

C₃₂H₂₀O₂N₂ *pp*-Diphenylenebisiminocamphor (FORSTER and SPINNER), 833.

C₃₆ Group.

C₃₆H₂₄O₄ 3:4-Methylenedioxybenzamarone (DAS and GHOSH), 820.

C₃₆H₂₆O₂ *p*-Methylbenzamarone (+ $\frac{1}{2}$ H₂O), (DAS and GHOSH), 820.

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Page	Line	
811	7*	for "a _n " read "[a] _n ."
818	9	for "a _n " read "[a] _n ."
816	1	for "0.1060 H ₂ O" read "0.1066 H ₂ O."
Contents, p. i, line 14, p. 821, in title and headlines pp. 821-825 for "MAZUM-		
BAR" read "MAZUMDER."		
Contents, p. i, line 5, p. 1140, in title and headlines pp. 1140-1144 for "FRED-		
ERICK PAGE EVANS" read "FREDERICK PAGE EVANS."		

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ERRATA.

VOL. XCII (ABSTR., 1907).

Page Line
i. 216 bottom for "m.p. 240°" read "m.p. 204°."

VOL. CIV (ABSTR., 1913).

Page	Col.	Line	
i. 780		17	} for "Nitrous oxide" read "Nitric oxide."
		19	
		20	
		10*	
		9*	
		4*	
ii. 1210	i.	32	}
		36	
ii. 1337		28	
ii. 1390	ii.	19*)

VOL. CVIII (ABSTR., 1915).

Page	Col.	Line	
i. 326		18	} for "Nitrous oxide" read "Nitric oxide."
		21	
ii. 934	ii.	16	} the entry "behaviour of various substances with (PANZER), A., i, 326," should be transposed to line 19 (under nitrogen dioxide).
ii. 1079	8-10		

VOL. CXVI. (ABSTR., 1919).

Page	Line	
i. 357	15	for "antipyrine" read "1-phenyl-3-methyl-5-pyrazolone."
i. 402	1	"BRENER" read "BREUER."
i. 559	13	"ERIC DODDRELL EVANS" read "ERIC DODDRELL EVENS."
ii. 261	13	"ten" read "two."
ii. 263	24	"ALBERT NOYES" read "WILLIAM A. NOYES, jun."
ii. 312	20	"KIRCHOF" read "KIRCHHOFF."
ii. 327	7*	"LANGHAUS" read "LANGHANS."
ii. 351	15	"ZUFFEL" read "ZIFFEL."
ii. 443	3*	"HORSCH" read "HORSCH."
ii. 446	7*	after "421-73°" insert "on the platinum resistance scale."
ii. 529	15*	for "chloroform" read "iodoform."

* From bottom.

INSTRUCTIONS TO ABSTRACTORS,

GIVING THE

NOMENCLATURE AND SYSTEM OF NOTATION

ADOPTED IN THE ABSTRACTS.

THE object of the abstracts of chemical papers published elsewhere than in the Transactions of the Society is to furnish the Fellows with a concise account of the progress of chemical science from month to month. It must be understood that as the abstracts are prepared for the information of the Fellows in general, they cannot possibly be made so full or so detailed as to obviate on the part of those who are engaged on special investigations the necessity of consulting the original memoirs.

1. Titles of papers must be given literally.
2. Before beginning to write the abstract, the whole of the original paper must be read, in order that a judgment may be formed of its importance and of the scale on which the abstract should be made.
3. In the case of papers dealing with subjects not strictly chemical, the abstract should refer only to matters of chemical interest in the original.
4. The abstract should consist mainly of the expression, in the abstractor's own words, of the substance of the paper.
5. The abstract should be made as short as is consistent with a clear and accurate statement of the author's results.
6. A concise statement showing the general trend of the investigation should be given at the commencement of those abstracts where the nature of the original permits of it.
7. If an abstract of a paper on the same subject, either by the author of the paper abstracted, or by some other author, has already appeared, note should, as a rule, be made of this fact.
8. Matter which has appeared once in the *Abstracts* is not to be abstracted again, a reference being given to the volume in which the abstract may be found.
9. As a rule, details of methods of preparation or analysis, or generally speaking of work, are to be omitted, unless such details are essential to the understanding of the results, or have some independent value. Further, comparatively unimportant compounds, such as the inorganic salts of organic bases or acids, should be mentioned quite shortly. On the other hand, data such as melting and boiling points, sp. gr., specific rotation, &c., must be given in every case unless recorded in earlier papers.

Nomenclature.

10. Employ names such as *sodium chloride*, *potassium sulphate* for inorganic compounds, and use the terminals *ous* and *ic* only in distinguishing compounds of different orders derived from the same elementary radicle; such, for instance, as mercurous and mercuric chlorides, sulphurous and sulphuric acids.

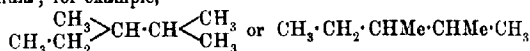
11. Term compounds of metallic radicles with the OH-group *hydroxides* and not hydrates, the name hydrate being reserved for compounds supposed to contain water of combination or crystallisation.

12. Term salts containing an amount of metal equivalent to the displaceable hydrogen of the acid, *normal* and not neutral salts, and assign names such as sodium hydrogen sulphate, disodium hydrogen phosphate, &c., to the acid salts. Basic salts as a rule are best designated merely by their *formulae*.

13. Names in common use for oxides should be employed, for example: NO, nitric oxide; CO₂, carbon dioxide; P₄O₁₀, phosphoric oxide; As₂O₃, arsenious oxide; Fe₂O₃, ferric oxide.

14. In open chain compounds, Greek letters must be used to indicate the position of a substituent, the letter *a* being assigned to the first carbon atom in the formula, except in the case of CN and CO₂H, for example, CH₃·CH₂·CH₂·CH₂I *a*-iodobutane, CH₃·CH₂·CH₂·CN *a*-cyanopropane.

15. Isomeric open chain compounds are most conveniently represented as substitution derivatives of the longest carbon chain in the formula; for example,



should be termed *βγ*-dimethylpentane not methylethylisopropylmethane, and $\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3 > \text{CH} \cdot \text{CH} < \begin{array}{c} \text{CH}_3 \\ | \\ \text{CO}_2\text{H} \end{array} \end{array}$ or CH₃·CHMe·CHMe·CO₂H should be termed *αβ*-dimethylbutyric acid, not *αββ*-trimethylpropionic, or *α*-methylisovaleric, or methylisopropylacetic acid.

16. Use names such as methane, ethane, &c., for the normal paraffins or hydrocarbons of the C_nH_{2n+2} series of the form CH₃·[CH₂]_n·CH₃, &c. Term the hydrocarbons C₂H₄ and C₂H₂ ethylene and acetylene respectively (not ethene and ethine). Homologues of the ethylene series are to be indicated by the suffix *-ene*, and those of the acetylene series, wherever possible, by *-ine*. Adopt the name *allene* for the hydrocarbon CH₂:C:CH₂.

•17. Distinguish all hydroxyl derivatives of hydrocarbons by names ending in *ol*. Alcohols should be spoken of as mono-, di-, tri-, or n-hydric, according to the number of OH-groups. Compounds which are not alcohols, but for which names ending in *ol* have been used, are to be represented by names ending in *ole*, if a systematic name cannot be given, thus anisole not anisol, indole not indol. Compounds such as MeONa, EtONa, &c., should be termed sodium methoxide, sodium ethoxide, &c.

18. The radicles indicated in the name of a compound are to be

given in the order fluoro-, chloro-, bromo-, iodo-, nitro-, nitroso-, amino-, imino-, cyano-, thiocyno-, hydroxy-, keto-.

19. Compounds analogous to the acids of the lactic series containing the OH-group should be termed *hydroxy*-derivatives, and not *oxy*-derivatives; for example, hydroxyacetic and not oxyacetic acid. Compounds containing the analogous groups OEt, OPh, OAc, &c., should in like manner be termed ethoxy-, phenoxy-, acetoxy-derivatives. Thus α -ethoxypropionic acid, $\text{OEt}\cdot\text{CHMe}\cdot\text{CO}_2\text{H}$, instead of ethyl-lactic acid; 3:4-diethoxybenzoic acid, $(\text{OEt})_2\text{C}_6\text{H}_3\cdot\text{CO}_2\text{H}$, instead of diethylprotocatechuic acid; and α -acetoxypropionic acid, $\text{OAc}\cdot\text{CHMe}\cdot\text{CO}_2\text{H}$, instead of acetyl-lactic acid. Terms such as diethylprotocatechuic acid should be understood to mean a compound formed by the displacement of hydrogen atoms in the hydrocarbon radicle of protocatechuic acid by ethyl, thus, $\text{C}_6\text{H}_4\text{Et}_2(\text{OH})_2\cdot\text{CO}_2\text{H}$, and not $\text{C}_6\text{H}_3(\text{OEt})_2\cdot\text{CO}_2\text{H}$, just as dibromoprotocatechuic acid is understood to be the name of a compound of the formula $\text{C}_6\text{HBr}_2(\text{OH})_2\cdot\text{CO}_2\text{H}$.

20. The term *ether* should be restricted to the oxides of hydrocarbon radicles and their derivatives, and the esters (so-called compound ethers or ethereal salts) should be represented by names similar to those given to metallic salts.

21. When a substituent is one of the groups NH_2 , NHR , NR_2 , NH or NR , its name should end in *ino*; for example, β -aminopropionic acid, $\text{NH}_2\cdot\text{CH}_2\cdot\text{CH}_2\cdot\text{CO}_2\text{H}$, β -anilinoacrylic acid, $\text{NHPh}\cdot\text{CH}:\text{CH}\cdot\text{CO}_2\text{H}$, α -iminopropionic acid, $\text{NH}\cdot\text{CMe}\cdot\text{CO}_2\text{H}$.

22. Compounds of the radicle SO_3H should, whenever possible, be termed sulphonic acids, or failing this, sulpho-compounds; for example, benzenesulphonic acid, sulphobenzoic acid.

23. Basic substances should invariably be indicated by names ending in *ine*, as aniline instead of anilin, the termination *in* being restricted to certain neutral compounds, viz., glycerides, glucosides, bitter principles, and proteins, such as palmitin, amygdalin, albumin. The compounds of basic substances with hydrogen chloride, bromide or iodide should always receive names ending in *ide* and not *ate*, as morphine hydrochloride and not morphine hydrochlorate.

24. The Collective Index, 4th decade (1903-1912) should be adopted as the standard of reference on questions of nomenclature not provided for in the preceding sections.

Notation.

25. In empirical formulae the elements are to be given in the order C, H, O, N, Cl, Br, I, F, S, P, and the remainder alphabetically.

26. Equations should be omitted unless essential to the understanding of the results; as a rule, they should not be written on a separate line, but should "run on" with the text.

27. To economise space, it is desirable:

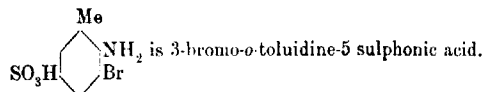
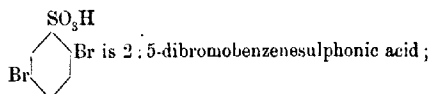
- (a) That *dots* should be used instead of *dashes* in connecting contiguous symbols or radicles, whenever this does not interfere with the clearness of the formula.

- (b) That formulae should be shortened by the judicious employment of the symbols Me for CH_3 , Et for C_2H_5 , Pr^a for $\text{CH}_2\cdot\text{CH}_2\cdot\text{CH}_3$, Pr^s for $\text{CH}(\text{CH}_3)_2$, Ph for C_6H_5 , Py for $\text{C}_5\text{H}_4\text{N}$, Ac for $\text{CO}\cdot\text{CH}_3$, and Bz for $\text{CO}\cdot\text{C}_6\text{H}_5$.

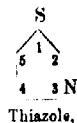
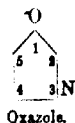
- (c) That formulae should be written *in one line* whenever this can be done without obscuring their meaning.

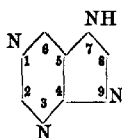
28. In representing the constitution of benzene derivatives, the relative positions of the radicles in the symbol of benzene should be indicated by numerals, instead of by means of the hexagon formula.

- (a) The abbreviations *o*-, *m*-, and *p*-, should be used in place of 1:2- or ortho-, 1:3- or meta-, and 1:4- or para.
- (b) In numbering positions in the case of substitution derivatives of phenol, aniline, benzonitrile, benzoic acid, benzenesulphonic acid, benzaldehyde, and toluene, the characteristic radicle of each of these parent substances is to be regarded as in position 1 (compare Collective Index).
- (c) Names of substitution derivatives should be given in such a way that the position of the substituent is indicated by a numeral prefixed; for example:—



29. In representing the constitution of derivatives of other "closed chain" hydrocarbons, graphic formulae should not be employed, but the system of numbering positions indicated in Richter's *Lexikon der Kohlenstoff-Verbindungen* (3rd edition, 1910, pp. 14—26) should be used, of which the following schemes may be regarded as typical:—





Purine.*



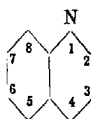
Pyridine.



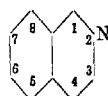
Indole.



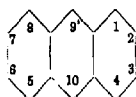
Naphthalene.



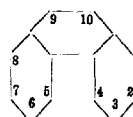
Quinoline.



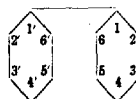
isoQuinoline.



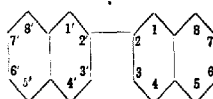
Anthracene.



Phenanthrene.



Diphenyl.

 $\beta\beta$ -Dinaphthyl.**Manuscript.**

30. In view of the difficulty of dealing with MSS. of widely varying sizes, abstracts cannot be accepted unless written on quarto paper (10 x 8 in.).

31. Not more than one abstract must appear on a sheet.

32. When an abstract exceeds a sheet in length, the sheets must be fastened together by means of gum at the top left-hand corner.

33. The name of the abstractor must be written diagonally at the top left-hand corner of the first sheet of the abstract.

Proofs.

34. Abstractors are expected to read and correct proofs carefully, and to check all formulae and figures against MSS.

35. All proofs, however small, must be returned to the Sub-Editor not later than 24 hours after receipt from the printers.

* * The Editor's decision, in all matters connected with the Abstracts, must be considered final.

* This numbering, proposed originally by E. Fischer, is adopted in the text of the *Lexikon*.

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1919. Vol. CXVI. Part I.

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ABBREVIATED TITLE.	JOURNAL.
<i>Abh. Böhm. Akad.</i> . . .	Abhandlungen der Böhmischen Akademie.
<i>Abh. Deut. Naturwiss. Med. Ver. Böhmen.</i> . . .	Abhandlungen der Deutschen Naturwissenschaftlichen und Medizinischen Verein, Böhmen.
<i>Acad. Sci. Fennicae</i> . . .	Acta Societatis Scientiarum Fennicae.
<i>Agric. Bull. F. M. S.</i> . . .	Agricultural Bulletin of the Federated Malay States.
<i>Agric. Exp. Stat. Univ. Wisconsin Res. Bull.</i> . . .	Agricultural Experimental Station, University of Wisconsin, Research Bulletin.
<i>Agric. Gaz. S. Russia.</i> . . .	Agricultural Gazette of Southern Russia.
<i>Agric. J. India</i> . . .	Agricultural Journal of India.
<i>Agric. Ledger</i> . . .	Agricultural Ledger.
<i>Agric. Res. Inst., Pusa Rep. (Bull.)</i> . . .	Agricultural Research Institute, Pusa, Report and Bulletins.
<i>Agric. and Sylvic.</i> . . .	Agriculture and Sylviculture (Petrograd).
<i>Allgem. Brau.-Hopf. Zeit.</i> . . .	Allgemeine Brau- und Hopfen-Zeitung.
<i>Allgem. Gerber-Zeit.</i> . . .	Allgemeine Gerber-Zeitung.
<i>Allgem. Z. Bierbrau. u. Malzfabr.</i> . . .	Allgemeine Zeitschrift für Bierbrauerei und Malzfabrikation.
<i>Anat. Fotog.</i> . . .	Amator Fotografen.
<i>Amer. Brewers' J.</i> . . .	American Brewers' Journal.
<i>Amer. Brewers' Rev.</i> . . .	American Brewers' Review.
<i>Amer. J. Bot.</i> . . .	American Journal of Botany.
<i>Amer. J. Dis. Children</i> . . .	American Journal of Diseases of Children.
<i>Amer. J. Pharm.</i> . . .	American Journal of Pharmacy.
<i>Amer. J. Physiol.</i> . . .	American Journal of Physiology.
<i>Amer. J. Publ. Health</i> . . .	American Journal of Public Health.
<i>*Amer. J. Sci.</i> . . .	American Journal of Science.
<i>Amer. Mach.</i> . . .	American Machinist.
<i>Amer. Min.</i> . . .	American Mineralogist.
<i>Amer. Perf.</i> . . .	American Perfumer.
<i>Amer. Phot.</i> . . .	American Photography.
<i>Anal. Fis. Quim.</i> . . .	Anales de la Sociedad Española Física y Química.
<i>Anal. Soc. Quim. Argentina</i> . . .	Anales de la Sociedad Química Argentina.
<i>Analyst</i> . . .	Analyst.
<i>Annalen</i> . . .	Justus Liebig's Annalen der Chemie.
<i>Ann. Bot.</i> . . .	Annals of Botany.
<i>Ann. di Bot.</i> . . .	Annali di Botanica.
<i>Ann. Chim.</i> . . .	Annales de Chimie.
<i>Ann. Chim. Analyt.</i> . . .	Annales de Chimie Analytique.
<i>Annali Chim. Appl.</i> . . .	Annali di Chimica Applicata.
<i>Ann. Ecole Agric. Montpellier</i> . . .	Annales de l'Ecole nationale d'Agriculture de Montpellier.
<i>Ann. Falsif.</i> . . .	Annales des Falsifications.
<i>Ann. Geol. Min. Russie</i> . . .	Annuaire de la Géologie et de la Minéralogie de Russie.
<i>Ann. hyg. pub. med. legale.</i> . . .	Annales d'hygiène publique et de médecine légale.
<i>Ann. Inst. Mines, Petrograd</i> . . .	Annales de l'Institut des Mines, Petrograd.
<i>Ann. Inst. Pasteur</i> . . .	Annales de l'Institut Pasteur.
<i>Ann. Inst. Polyt., Petrograd</i> . . .	Annales de l'Institut Polytechnique, Petrograd.
<i>Ann. Physik</i> . . .	Annalen der Physik.
<i>Ann. Physique</i> . . .	Annales de Physique.
<i>Ann. R. Staz. Chim. Agrar. Sardin.</i> . . .	Annali della R. Stazione Chimica Agraria Sperimentale di Roma.
<i>Ann. sci. Univ. Jassy</i> . . .	Annales scientifiques de l'Université de Jassy.

iv JOURNALS FROM WHICH ABSTRACTS ARE MADE.

ABBREVIATED TITLE.	JOURNAL.
<i>Ann. Soc. Geol. Belg. ; Publ. rel. au Congo Belge</i>	Annales de la Société géologique de Belgique : Publications relatives au Congo Belge.
<i>Apoth. Zeit.</i>	Apotheker-Zeitung.
<i>App. Sci.</i>	Applied Science.
<i>Arch. Gebiet. Physik, Math. Chem.</i>	Arbeiten aus dem Gebiete der Physik, Mathematik und Chemie.
<i>Arch. Gesundh. Amt.</i>	Arbeiten aus dem Gesundheitsamte.
<i>Arch. Anat. Physiol.</i>	Archiv für Anatomie und Physiologie.
<i>Arch. Chem. Mikros.</i>	Archiv Chemie und Mikroskopie.
<i>Arch. Entw.-mech. Org.</i>	Archiv für Entwicklungsmechanik der Organismen.
<i>Arch. expt. Path. Pharm.</i>	Archiv für experimentelle Pathologie und Pharmakologie.
<i>Arch. farm. sper. sci. aff.</i>	Archivio di farmacologia sperimentale e scienze affini.
<i>Arch. Fisiol.</i>	Archivio di Fisiologia.
<i>Arch. Hyg.</i>	Archiv für Hygiene.
<i>Arch. Int. Med.</i>	The Archives of Internal Medicine.
<i>Arch. ital. Biol.</i>	Archives italiennes de Biologie.
<i>Arch. Med. Pharm. milit.</i>	Archives de Médecine et de Pharmacie militaires.
<i>Arch. Néerland.</i>	Archives Néerlandaises de sciences exactes et naturelles.
<i>Arch. Néerland. physiol.</i>	Archives Néerlandaises de physiologie de l'homme et des animaux.
<i>*Arch. Pharm.</i>	Archiv der Pharmazie.
<i>Arch. physikal. Chem. Glas. Keram.</i>	Archiv für die physikalische Chemie der Gläser und der Keramischen Massen.
<i>Arch. Sci. biol. Petrograd.</i>	Archives des Sciences biologiques, Petrograd.
<i>Arch. Sci. phys. nat.</i>	Archives des Sciences physiques et naturelles.
<i>Arch. Suikerind. Ned. Indie</i>	Archief voor de Suikerindustrie in Nederlandsch-Indië.
<i>Arkiv. Kem. Min. Geol.</i>	Arkiv. för Kemi, Mineralogi och Geologi.
<i>Arm. Beton</i>	Armierter Beton.
<i>*Atti R. Accad. Lincei</i>	Atti della Reale Accademia dei Lincei.
<i>Atti R. Accad. Sci. Torino</i>	Atti della Reale Accademia delle Scienze di Torino.
<i>Atti R. Ist. Veneto Sci.</i>	Atti del Istituto Veneto di Scienze, Lettere ed Arti.
<i>Aust. Pharm. Notes</i>	Australian Pharmaceutical Notes and News.
<i>Beitr. Min. Japan</i>	Beiträge zur Mineralogie von Japan.
<i>Berg. Hüttenm. Rundsch.</i>	Berg- und Hüttenmannisches Rundschau.
<i>*Ber.</i>	Berichte der Deutschen chemischen Gesellschaft.
<i>Ber. Deut. bot. Ges.</i>	Berichte der Deutschen botanischen Gesellschaft.
<i>Ber. Deuts. pharm. Ges.</i>	Berichte der Deutschen pharmazeutischen Gesellschaft.
<i>Ber. Deut. physikal. Ges.</i>	Berichte der Deutschen physikalischen Gesellschaft.
<i>Ber. K. Sachs. Ges. Wiss.</i>	Berichte über die Verhandlungen der Königlich Sächsischen Gesellschaft der Wissenschaften.
<i>Ber. Oberhess. Ges. Natur. Heilkunde.</i>	Berichte der Oberhessischen Gesellschaft für Natur- und Heilkunde zu Giessen.
<i>Ber. Ohara Inst. landw. Forsch.</i>	Berichte des Ohara Instituts für landwirtschaftliche Forschungen.
<i>Berlin. Klin. Woch.</i>	Berliner Klinische Wochenschrift.
<i>*Bied. Zentr.</i>	Biedermann's Zentralblatt für Agrikulturchemie und rationallon Landwirtschafts-Betrieb.
<i>Biochem. Bull.</i>	Biochemical Bulletin.
<i>*Biochem. J.</i>	Biochemical Journal.
<i>*Biochem. Zeitsch.</i>	Biochemische Zeitschrift.
<i>Blätter Zucker.</i>	Blätter für Zuckerrübenbau.
<i>Ed. of Trade J.</i>	Board of Trade Journal.
<i>Bol. Acad. Nac. Ciencias, Cordoba.</i>	Boletín de la Academia Nacional des Ciencias, Cordoba.
<i>Boll. Chim. farm.</i>	Bollettino Chimico farmaceutico.
<i>Boll. Soc. Geol. Ital.</i>	Bollettino della Società Geologica Italiana.
<i>Boll. Soc. Med.-Chirurg.</i>	Bollettino della Società Medico-Chirurgica, Pavia.

JOURNALS FROM WHICH ABSTRACTS ARE MADE.

ABBREVIATED TITLE.	JOURNAL.
<i>Bot. Centr.</i>	Botanisches Centralblatt.
<i>Bot. Gaz.</i>	Botanical Gazette.
<i>Brass. Malt.</i>	Brasserie et Malterie.
<i>Brau- u. Malzind.</i>	Brau- u. Malzindustrie.
<i>Braunkohle</i>	Braunkohle.
<i>Brewers' J.</i>	Brewers' Journal.
<i>Brit. and Col. Pharm.</i>	British and Colonial Pharmacist.
<i>Brit. J. Phot.</i>	British Journal of Photography.
<i>Brit. Med. J.</i>	British Medical Journal.
<i>Brit. Pat.</i>	British Patent.
<i>Buletinul Chim.</i>	Buletinul Chimie.
<i>Bul. Soc. Chim. România</i>	Buletinul Societății de Chimie din România.
<i>Bul. Soc. Române Știin.</i>	Buletinul Societății Române de Științe.
<i>Bull. Acad. roy. Belg.</i>	Académie royale de Belgique—Bulletin de la Classe des Sciences.
<i>Bull. Acad. Sci. Cracow</i>	Bulletin international de l'Académie des Sciences de Cracovie.
<i>Bull. Acad. Sci. Petrograd.</i>	Bulletin de l'Académie Impériale des Sciences de Petrograd.
<i>Bull. Acad. Sci. Roumaine</i>	Bulletin de la Section Scientifique de l'Académie Roumaine.
<i>Bull. Agric. Intell.</i>	Bulletin of the Bureau of Agricultural Intelligence and of Plant Diseases.
<i>Bull. Assoc. Chim. Sucr.</i>	Bulletin de l'Association des Chimistes de Sucre et de Distillerie.
<i>Bull. Bureau of Standards</i>	Bulletin of the Bureau of Standards (U.S.A.).
<i>Bull. Com. Géol. Finlande.</i>	Bulletin de la Commission Géologique de Finlande.
<i>Bull. Dept. Agric. Ceylon</i>	Bulletin of the Department of Agriculture, Ceylon.
<i>Bull. Dept. Agric. Trinidad</i>	Bulletin of the Department of Agriculture, Trinidad.
<i>Bull. Forest Exp. Stat. Meguro.</i>	Bulletin of the Forest Experiment Station, Meguro, Tokyo.
<i>Bull. gén. Thérap.</i>	Bulletin général de Thérapeutique médicale, chirurgicale, obstétricale.
<i>Bull. Geol. Inst. Univ. Upsala.</i>	Bulletin of the Geological Institution of the University of Upsala.
<i>Bull. Geol. Soc. Amer.</i>	Bulletin of the Geological Society of America.
<i>Bull. Geol. Survey, U.S.A.</i>	Bulletin of the U.S. Geological Survey.
<i>Bull. Geol. Survey, West Australia.</i>	Bulletin of the Geological Survey, West Australia.
<i>Bull. Imp. Centr. Agric. Exp. Stat. Japan.</i>	Bulletin of the Imperial Central Agricultural Experimental Station of Japan.
<i>Bull. Imp. Inst.</i>	Imperial Institute Bulletin.
<i>Bull. Johns Hopkins Hospital</i>	Bulletin of Johns Hopkins Hospital.
<i>Bull. Ranade Indus. Econ. Inst. Poona.</i>	Bulletin of the Ranade Industrial and Economic Institute, Poona.
<i>Bull. School Mines and Met., Univ. Missouri</i>	Bulletin of the School of Mines and Metallurgy, University of Missouri.
<i>Bull. Sci. Pharmacol.</i>	Bulletin des Sciences Pharmacologiques.
<i>*Bull. Soc. chim.</i>	Bulletin de la Société chimique de France.
<i>*Bull. Soc. chim. Belg.</i>	Bulletin de la Société chimique de Belgique.
<i>Bull. Soc. chim. biol.</i>	Bulletin de la Société de chimie biologique.
<i>Bull. Soc. chim. Maurice</i>	Bulletin de la Société chimique de Maurice.
<i>Bull. Soc. d'Encour.</i>	Bulletin de la Société d'Encouragement pour l'Industrie Nationale.
<i>Bull. Soc. franç. Min.</i>	Bulletin de la Société française de Minéralogie.
<i>Bull. Soc. Franç. Phot.</i>	Bulletin de la Société Française de Photographie.
<i>Bull. Soc. Ind. Mulhouse</i>	Bulletin de la Société Industrielle de Mulhouse.
<i>Bull. Soc. Ind. Nord.</i>	Bulletin de la Société Industrielle du Nord de la France.

ABBREVIATED TITLE.	JOURNAL.
Bull. Soc. Ind. Rouen . . .	Bulletin de la Société Industrielle de Rouen.
Bull. Soc. Ourat. Sci. Nat. . .	Bulletin de la Société Ouralienne des Amateurs des Sciences Naturelles à Catherineberg.
Bull. Soc. Pharm. Bordeaux . .	Bulletin des Travaux de la Société de Pharmacie de Bordeaux.
Bull. Wellcome Trop. Res. Lab. .	Bulletin of the Wellcome Tropical Research Laboratory.
Cairo Sci. J.	Cairo Scientific Journal.
Canada Dept. Mines Publ. . .	Canada Department of Mines Publications.
Canadian Med. Assoc. J. . . .	Canadian Medical Association Journal.
Canadian Mining J.	Canadian Mining Journal.
Caoutchouc et Gutta-Percha . .	Le Caoutchouc et le Gutta-Percha.
Cement	Cement.
*Centr. Bakt. Par.	Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten.
Centr. Kunstdüngerind.	Centralblatt für Kunstdüngerindustrie.
Centr. Min.	Centralblatt für Mineralogie, Geologie und Palaeontologie.
Centr. Zuckerind.	Centralblatt für Zuckerindustrie.
Céramique	Céramique.
Ch. of Comm. J.	Chamber of Commerce Journal.
Chemik Polski	Chemik Polski.
Chem. App.	Chemische Apparatur.
Chem. Eng.	Chemical Engineer.
Chem. Erde	Chemie der Erde.
Chem. Ind.	Chemische Industrie.
*Chem. News	Chemical News.
Chem. Trade J.	Chemical Trade Journal.
Chem. Umschau Fett-Ind. . . .	Chemische Umschau über die Fett- und Harz-Indus- trie.
*Chem. Weekblad	Chemisch Weekblad.
Chem.-Zeit.	Chemiker-Zeitung.
Chem. Zeitsch.	Chemische Zeitschrift.
*Chem. Zentr.	Chemisches Zentralblatt.
Chem. and Drug.	Chemist and Druggist.
*Chim. et Ind.	Chimie et Industrie.
Collegium	Collegium.
*Compt. rend.	Comptes rendus hebdomadaires des Séances de l'Académie des Sciences.
Compt. rend. l'Acad. d'Agric. .	Comptes rendus des Séances de l'Académie d'Agriculture de France.
Compt. rend. Soc. Biol. . . .	Comptes rendus hebdomadaires de Séances de la Société de Biologie.
Comptes rend. Trav. Lab. Carlsberg	Comptes rendus des Travaux de Laboratoire de Carlsberg.
D. R. P.	Deutscher Reichs-Patent.
Dept. Chem. S. Australia, Bull.	Department of Chemistry, South Australia, Bulletins.
Derm. Woch.	Dermatologische Wochenschrift.
Deut. Essigind.	Deutsche Essigindustrie.
Deut. Machan. Zeit.	Deutsche Mechaniker Zeitung.
Deut. med. Woch.	Deutsche medizinische Wochenschrift.
Deut. Parfum. Zeit.	Deutsche Parfümerie Zeitung.
Deuts. Zuckerind.	Deutsche Zuckerindustrie.
Econ. Geol.	Economic Geology.
Econ. Proc. Roy. Dubl. Soc. . .	Economic Proceedings of the Royal Dublin Society.
Electrician	Electrician.
Elektrochem. Zeits.	Elektrochemische Zeitschrift.
Eng. and Min. J.	Engineering and Mining Journal.
Eng. News	Engineering News.
Eng. Rec.	Engineering Record.
Engrais	L'Engrais.

ABBREVIATED TITLE.	JOURNAL.
Exper. Stat. Rec.	Experimental Station Record.
Fachl. Mitt. Öst. Tabak.	Fachliche Mitteilungen der Österreichische Tabakregie.
Farber-Zeit.	Farber-Zeitung.
Farben-Zeit.	Farben-Zeitung.
Farm	The Farm (Russia).
Fermentforsch.	Fermentforschung.
Ferrum	Ferrum.
Feuerungstechnik	Feuerungstechnik.
Flora	Flora.
Földtani Közlöny	Földtani Közlöny.
Fr. Pat.	French Patent.
Fühlings Landw. Zeit.	Fühlings Landwirtschaftliche Zeitung.
Gas	Hot Gas.
Gas J.	Gas Journal.
Gas Rec.	Gas Record.
*Gazzetta	Gazzetta chimica italiana.
Geol. För. Förh.	Geologiska Föreningens i Stockholm Förhandlingar.
Geol. Mag.	Geological Magazine.
Gerber	Gerber.
Gesundheitsing.	Gesundheitsingenieur.
Gornosaw. Djelo.	Gornosawodskoje Djelo.
Gummi-Zeit.	Gummi-Zeitung.
Handl. Vijft. Nat.	Handelingen van het Vijftende Natuur.
Hawaii Agric. Exp. Stat. Bull.	Hawaii Agricultural Experiment Station Bulletins.
Heart	Heart.
Helv. Chim. Acta	Helvetica Chimica Acta.
Hess. Landw. Zeits.	Hessische Landwirtschaftliche Zeitschrift.
Hyg. Rundsch.	Hygienische Rundschau.
Indian Forest Bull.	Indian Forest Bulletin.
Indian J. Med. Res.	Indian Journal of Medical Research.
India-rubber J.	India-rubber Journal.
Ingenieur	De Ingenieur.
Int. Mitt. Bodenk.	Internationale Mitteilungen für Bodenkunde.
Int. Sugar J.	International Sugar Journal.
Int. Z. Metallog.	Internationale Zeitschrift für Metallographie.
Int. Zeitsch. phys.-chem. Biol.	Internationale Zeitschrift für physikalisch-chemische Biologie.
Iron Steel Inst. Carnegie Schol. Mem.	Iron and Steel Institute, Carnegie Scholarship Memoirs.
Jahrb. K. K. Geol. Reichsanst.	Jahrbuch der K. K. geologischen Reichsanstalt.
Jahrb. Min.	Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie.
Jahrb. Min. Beil.-Bd.	Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie, Beilage-Band.
Jahrb. Radioaktiv. Elektr.	Jahrbuch der Radioaktivität und Elektronik.
Jahrb. tronsk.	
Jahrb. wiss. Bot.	Jahrbuch für wissenschaftliche Botanik.
Jahresber. Ges. vaterl. Kultur.	Jahresbericht der schlesischen Gesellschaft für vaterländische Kultur.
Jernk. Ann.	Jernkontorets Annaler.
J. d'Agric. prat.	Journal d'Agriculture Pratique.
*J. Agric. Res.	Journal of Agricultural Research.
*J. Agric. Sci.	Journal of Agricultural Science.
J. d'Agric. Trop.	Journal d'Agriculture Tropicque.
J. Agric. Victoria	Journal of Agriculture, Victoria.
*J. Amer. Chem. Soc.	Journal of the American Chemical Society.
J. Amer. Leather Chem. Assoc.	Journal of the American Leather Chemists' Association.
J. Amer. Med. Assoc.	Journal of the American Medical Association.
J. Amer. Pharm. Assoc.	Journal of the American Pharmaceutical Association.

ABBREVIATED TITLE.	JOURNAL.
<i>J. Assoc. Off. Agric. Chem.</i>	Journal of the Association of Official Agricultural Chemists.
* <i>J. Biol. Chem.</i>	Journal of Biological Chemistry, New York.
<i>J. Board Agric.</i>	Journal of the Board of Agriculture.
<i>J. Canad. Min. Inst.</i>	Journal of the Canadian Mining Institute.
<i>J. Chem. Ind. Tokyo</i>	See Kōgyō- Kwagaku-Zasshi.
<i>J. Chem. Met. Soc. S. Africa</i>	Journal of the Chemical, Metallurgical, and Mining Society of South Africa.
<i>J. Chim. physique</i>	Journal de Chimie physique.
<i>J. Coll. Agric. Sapporo</i>	Journal of the College of Agriculture, Sapporo, Japan.
<i>J. Coll. Agric. Tohoku</i>	Journal of the College of Agriculture, Tohoku Imperial University, Japan.
<i>J. Coll. Agric. Tokyo</i>	Journal of the College of Agriculture, Tokyo Imperial University, Japan.
<i>J. Coll. Eng. Univ. Tokyo</i>	Journal of the College of Engineering, University of Tokyo.
* <i>J. Coll. Sci. Tokyo</i>	Journal of the College of Science, Imperial University of Tokyo.
<i>J. Exp. Med.</i>	Journal of Experimental Medicine.
<i>J. Franklin Inst.</i>	Journal of the Franklin Institute.
<i>J. Gasbeleucht.</i>	Journal für Gasbeleuchtung und Wasserversorgung.
<i>J. gen. Physiol.</i>	Journal of general Physiology.
<i>J. Genetics</i>	Journal of Genetics.
<i>J. Geol.</i>	Journal of Geology.
<i>J. Geol. Soc. Tokyo</i>	Chishitsugaku Zasshi (Journal of the Geological Society of Tokyo).
<i>J. Hygiene</i>	Journal of Hygiene.
<i>J. Imp. Gas Assoc. Tokyo</i>	Journal of the Imperial Gas Association of Tokyo.
<i>J. Ind. Eng. Chem.</i>	Journal of Industrial and Engineering Chemistry.
<i>J. Inst. Brewing</i>	Journal of the Institute of Brewing.
<i>J. Inst. Petroleum Tech.</i>	Journal of the Institute of Petroleum Technologists.
<i>J. Inst. Sanit. Eng.</i>	Journal of the Institute of Sanitary Engineers.
<i>J. Landw.</i>	Journal für Landwirtschaft.
<i>J. Manchester School Tech.</i>	Journal of the Manchester School of Technology.
<i>J. Marine Biol. Assoc. U.K.</i>	Journal of the Marine Biological Association of the United Kingdom.
<i>J. Med. Res.</i>	Journal of Medical Research.
<i>J. Path. Bact.</i>	Journal of Pathology and Bacteriology.
<i>J. Pharm. Chim.</i>	Journal de Pharmacie et de Chimie.
<i>J. Pharm. Expt. Ther.</i>	Journal of Pharmacology and Experimental Therapeutics.
* <i>J. Physical Chem.</i>	Journal of Physical Chemistry.
<i>J. Physiol.</i>	Journal of Physiology.
<i>J. Physiol. Path. gén.</i>	Journal de Physiologie et de Pathologie générale.
* <i>J. pr. Chem.</i>	Journal für praktische Chemie.
<i>J. Proc. Asiatic Soc. Bengal.</i>	Journal and Proceedings of the Asiatic Society of Bengal.
<i>J. Roy. Agric. Soc.</i>	Journal of the Royal Agricultural Society.
<i>J. Roy. Army Med. Corps</i>	Journal of the Royal Army Medical Corps.
<i>J. Roy. Hort. Soc.</i>	Journal of the Royal Horticultural Society.
<i>J. Roy. Soc. New South Wales</i>	Journal and Proceedings of the Royal Society of New South Wales.
<i>J. Roy. Soc. West Australia</i>	Journal of the Royal Society of West Australia.
* <i>J. Russ. Phys. Chem. Soc.</i>	Journal of the Physical and Chemical Society of Russia.
<i>J. Scot. Met. Soc.</i>	Journal of the Scottish Meteorological Society.
<i>J. Soc. Arts</i>	Journal of the Royal Society of Arts.
<i>J. Soc. Dyers and Col.</i>	Journal of the Society of Dyers and Colourists.
<i>J. Soc. Russe Métall.</i>	Journal de la Société Russe de Métallurgie.
<i>J. S. African Assoc. Anal. Chem.</i>	Journal of the South African Association of Analytical Chemists.

JOURNALS FROM WHICH ABSTRACTS ARE MADE. ix

ABBREVIATED TITLE.	JOURNAL.
J. Textile Inst. . . .	Journal of the Textile Institute.
J. Usines Gaz	Journal des Usines à Gaz.
J. Washington Acad. Sci. .	Journal of the Washington Academy of Science.
J. West Scotland Iron Steel Inst.	Journal of the West of Scotland Iron and Steel Institute.
K. Svenska Vet.-Akad. Handl.	Kongliga Svenska Vetenskaps Akademiens Handlingar.
Kali	Kali.
Karbid u. Azet.	Karbid und Azetylen.
Kentucky Exp. Stat. Bull.	Kentucky Experimental Station, Bulletin.
Keram. Rundsch.	Keramisch Rundschau.
Kew Bull.	Kew Bulletin.
Kiserlet Közl.	Kiserlet Közlemények.
Klein u. Mittelbrauer . . .	Klein und Mittelbrauer.
Könl. Landtbr. Handl. Tidskr.	See Bull. Agric. Intell.
Kōgyō-Kwagaku-Zasshi (J. Chem. Ind. Japan).	Kōgyō-Kwagaku-Zasshi (Journal of Chemical Industry, Japan).
*Kolloid Zeitsch.	Kolloid Zeitschrift.
*Koll. Chem. Beihefte . . .	Kolloid-chemische Beihefte.
Kosmos	Kosmos (Lemberg).
Kühn-Archiv	Kühn-Archiv.
Kunststoffe	Kunststoffe.
Lancet	The Lancet.
Landw. Jahrb.	Landwirtschaftliche Jahrbücher.
Landw. Versuchs.-Stat. . .	Die landwirtschaftlichen Versuchs-Stationen.
Leather Trades Rev. . . .	Leather Trades Review.
Leather Trades Year Book .	Leather Trades Year Book.
Leather World	Leather World.
Ledertech. Rundsch. . . .	Ledertechnische Rundschau.
Leipzig. Monatsch. Textil-Ind.	Leipziger Monatschrift für Textil-Industrie.
Le Radium	Le Radium.
L'Ind. Chimica	L'Industria Chimica.
L'Ind. Chimique	L'Industrie Chimique.
Lilly Sci. Bull.	Lilly Scientific Bulletin.
Local Govt. Bd. Reports . .	Local Government Board Reports.
Louisiana Bull.	Louisiana Bulletin.
Louisiana Planter	Louisiana Planter.
Lunds Univ. Årsskr. . . .	Lunds Universitets Årsskrift.
Math. és Termész. Ért. . .	Mathematikai és Természettudományi Értesítő, Budapest.
Mat. Grasses	Les Matières Grasses.
Medl. K. Vetenskapsakad. Nobel-Instit.	Meddelanden från Kongl. Vetenskapsakademiens Nobel-Institut.
Medl. on Greenland	Meddelelser on Greenland.
Med. Chron.	Medical Chronicle.
Med. Klinik	Medizinische Klinik.
Mem. Acad. Sci. Petrograd.	Mémoires de l'Académie Impériale des Sciences de Petrograd.
Mem. Accad. Lincei	Memorie della Reale Accademia dei Lincei.
Mem. Accad. Sci. Torino . .	Memorie della Reale Accademia delle Scienze di Torino.
Mem. Coll. Sci. Kyōtō . . .	Memoirs of the College of Science, Kyōtō Imperial University.
Mem. Coll. Sci. and Eng. Kyōtō Imp. Univ.	Memoirs of the College of Science and Engineering, Kyōtō Imperial University.
Mem. Dept. Agric. India . .	Memoirs of the Department of Agriculture in India.
Mem. Manchester Phil. Soc.	Memoirs and Proceedings of the Manchester Literary and Philosophical Society.
Mém. Poudres et Salpêtres .	Mémoires des Poudres et Salpêtres.

ABBREVIATED TITLE.	JOURNAL.
Mem. Soc. Ing. Civ. . . .	Mémoires de la Société des Ingénieurs Civils de France.
Mem. Soc. Natur. Kiev . . .	Mémoires de la Société des Naturalistes de Kiev.
Mem. Soc. Toscana Sci. Nat.	Memorie della Società Toscana di Scienze naturali residente in Pisa.
Metall u. Erz	Metall und Erz.
Met. and Chem. Eng. . . .	Metallurgical and Chemical Engineering.
Metallurgie	Metallurgie.
Metrop. Water Bd. Rep. . .	Metropolitan Water Board Reports.
Milch. Zentr.	Milchwirtschaftliches Zentralblatt.
Min. Mag.	Mineralogical Magazine and Journal of the Mineralogical Society.
Min. and Eng. Rev. . . .	Mining and Engineering Review.
Ministry of Agric. Egypt.	Ministry of Agriculture of Egypt. Technical Science Service.
Tech. Sci. Service	
Mitt. Centralst. wiss.-techn. Unters.	Mittheilungen aus der Centralstelle für wissenschaftlich-technische Untersuchungen.
Mitt. deut. Landw.-Ges. . .	Mittheilungen der deutschen Landwirtschafts-Gesellschaft.
Mitt. deut. milchwirt. Ver.	Mittheilungen des deutschen milchwirtschaftlichen Vereins.
Mitt. geol. Landesanst. . .	Mittheilungen der geologischen Landesanstalt von Elsass-Lothringen.
Mitt. k. Materialprüf. . . .	Mittheilungen aus dem königlichen Materialprüfungsamt zu Gross-Lichterfelde West.
Mitt. k. k. Techn. Versuchsanst.	Mittheilungen des k. k. Technischen Versuchsanst.
Mitt. med. Ges. Tokyo . . .	Mittheilungen der medizinischen Gesellschaft zu Tokyo.
Mitt. Naturforsch. Ges. Halle.	Mittheilungen der Naturforschenden Gesellschaft zu Halle.
Molk.-Zeit.	Molkerei-Zeitung.
*Monatsh.	Monatshefte für Chemie und verwandte Teile anderer Wissenschaften.
Monatsh. Math. Physik . . .	Monatshefte für Mathematik und Physik.
*Mon. Sci.	Moniteur Scientifique.
Montan. Rundsch.	Montanische Rundschau.
Month. Not. Roy. Astr. Soc.	Monthly Notices of the Royal Astronomical Society, London.
Munch. med. Woch.	Münchener medizinische Wochenschrift.
Mycol. Zentr.	Mycologisches Zentralblatt.
Nachr. Ges. Wiss. Göttingen.	Nachrichten von der Königlichen Gesellschaft der Wissenschaften zu Göttingen.
Nature	Nature.
Naturwiss.	Die Naturwissenschaften.
Naturw. Rundsch.	Naturwissenschaftliche Rundschau.
Nephthanoje Djelo	Nephthanoje Djelo.
New York Agr. Expt. Sta. Bull.	New York Agricultural Experiment Station Bulletins.
New Zealand Dominion Laby. Rept.	New Zealand Dominion Laboratory Reports.
Nova Acta Soc. Sci.	Nova Acta Regiae Societatis Scientiarum Upsaliensis.
Nuovo Cim.	Il Nuovo Cimento.
Öfvers. Finska Vet.-Soc.	Öfversigt af Finska Vetenskaps-Societätens Förhandlingar, Helsingfors.
Oelmotor	Der Oelmotor.
Oesterr. Chem.-Zeit. . . .	Oesterreichische Chemiker-Zeitung.
Oesterr. Z. Berg- u. Huttenw.	Oesterreichische Zeitschrift für Berg- und Huttenwesen.
Oil and Colour Trades J. . .	Oil and Colour Trades Journal.
Oil, Paint, and Drug Rep. .	Oil, Paint, and Drug Reporter.

ABBREVIATED TITLE.	JOURNAL.
<i>Oversigt Danske Vid. Selsk.</i>	Oversigt over det Kongelige Danske Videnskabernes Selskab Forhandlingar.
<i>P.</i>	Proceedings of the Chemical Society.
<i>Pahasapa Quart.</i>	Pahasapa Quarterly.
<i>Paper.</i>	Paper.
<i>Paper Maker.</i>	Paper Maker.
<i>Paper Making.</i>	Paper Making.
<i>Papierfabr.</i>	Papier-Fabrikant.
<i>Papier-Zeit.</i>	Papier-Zeitung.
<i>Perf. and Essent. Oil Rec.</i>	Perfumery and Essential Oil Record.
<i>Per. spis. Sofia.</i>	Periodicesko spisanie Sofia.
<i>Petroleum.</i>	Petroleum.
<i>Pflüger's Archiv.</i>	Archiv für die gesammte Physiologie des Menschen und der Thiera.
<i>Pharm. J.</i>	Pharmaceutical Journal.
<i>Pharm. Post.</i>	Pharmazeutische Post.
<i>Pharm. Weekblad.</i>	Pharmaceutisch Weekblad.
<i>Pharm. Zeit.</i>	Pharmazeutische Zeitung.
<i>Pharm. Zentr.-h.</i>	Pharmazeutische Zentrallhalle.
<i>Pharmazevt. J.</i>	Pharmazevtizieski Journal.
<i>Phil. Mag.</i>	Philosophical Magazine (The London, Edinburgh and Dublin).
<i>Phil. Trans.</i>	Philosophical Transactions of the Royal Society of London.
<i>Philippine J. Sci.</i>	Philippine Journal of Science.
<i>Phot. Ind.</i>	Photographische Industrie.
<i>Phot. J.</i>	Photographic Journal.
<i>Phot. Korrr.</i>	Photographische Korrespondenz.
<i>Phot. Rundsch.</i>	Photographische Rundschau.
<i>Physical Rev.</i>	Physical Review.
<i>Physikal. Zeitsch.</i>	Physikalische Zeitschrift.
<i>Porto Rico Exper. Stat. Bull.</i>	Porto Rico Experiment Station Bulletin.
<i>Proc. Amer. Phil. Soc.</i>	Proceedings of the American Philosophical Society.
<i>Proc. Amer. Physiol. Soc.</i>	Proceedings of the American Physiological Society.
<i>Proc. Amer. Soc. Biol. Chem.</i>	Proceedings of the American Society of Biological Chemists.
<i>Proc. Amer. Soc. Civ. Eng.</i>	Proceedings of the American Society of Civil Engineers.
<i>Proc. Amer. Soc. Testing Materials</i>	Proceedings of American Society for Testing Materials.
<i>Proc. Amer. Wood Preservers' Assoc.</i>	Proceedings of American Wood Preservers' Association.
<i>Proc. Austral. Inst. Min. Eng.</i>	Proceedings of the Australasian Institute of Mining Engineers.
<i>Proc. Brit. Foundrymen's Assoc.</i>	Proceedings of British Foundrymen's Association.
<i>Proc. Camb. Phil. Soc.</i>	Proceedings of the Cambridge Philosophical Society.
<i>Proc. Durham Phil. Soc.</i>	Proceedings of the Durham Philosophical Society.
<i>Proc. Eng. Soc. W. Pa.</i>	Proceedings of the Engineers' Society of Western Pennsylvania.
<i>Proc. Inst. Civ. Eng.</i>	Proceedings of the Institution of Civil Engineers.
<i>Proc. Inst. Mech. Eng.</i>	Proceedings of the Institution of Mechanical Engineers.
<i>Proc. Inst. Min. and Met.</i>	Proceedings of the Institution of Mining and Metallurgy.
<i>Proc. K. Akad. Wetensch. Amsterdam.</i>	Koninklijke Akademie van Wetenschappen te Amsterdam. Proceedings (English version).
<i>Proc. Nat. Acad. Sci.</i>	Proceedings of the National Academy of Sciences.
<i>Proc. Nova Scotia Inst. Sci.</i>	Proceedings of the Nova Scotia Institute of Science.
<i>Proc. Phil. Soc. Glasgow.</i>	Proceedings of the Glasgow Philosophical Society.
<i>Proc. Physical Soc. London.</i>	Proceedings of the Physical Society of London.

ABBREVIATED TITLE.	JOURNAL.
<i>Proc. Physiol. Soc.</i> . . .	Proceedings of the Physiological Society.
<i>Proc. Roy. Inst.</i> . . .	Proceedings of the Royal Institution of Great Britain.
<i>Proc. Roy. Irish Acad.</i> . . .	Proceedings of the Royal Irish Academy.
* <i>Proc. Roy. Soc.</i> . . .	Proceedings of the Royal Society.
<i>Proc. Roy. Soc. Edin.</i> . . .	Proceedings of the Royal Society of Edinburgh.
<i>Proc. Roy. Soc. Med.</i> . . .	Proceedings of the Royal Society of Medicine.
<i>Proc. Roy. Soc. Queensland.</i>	Proceedings of the Royal Society of Queensland.
<i>Proc. Roy. Soc. Tasmania.</i> . . .	Proceedings of the Royal Society of Tasmania.
<i>Proc. Soc. Chem. Ind. Victoria.</i>	Proceedings of the Society of Chemical Industry, Victoria.
<i>Proc. Soc. Exp. Biol. Med.</i> . . .	Proceedings of the Society for Experimental Biology and Medicine.
<i>Proc. U.S. Nat. Mus.</i> . . .	Proceedings of the United States National Museum.
<i>Proc. verb. Soc. Toscana Sci. Nat.</i>	Processi verbali Società Toscana di Scienze Naturali.
<i>Quart. J. Exp. Physiol.</i> . . .	Quarterly Journal of Experimental Physiology.
<i>Quart. J. Geol. Soc.</i> . . .	Quarterly Journal of the Geological Society.
<i>Quart. J. Med.</i> . . .	Quarterly Journal of Medicine.
<i>Queensland Agric. J.</i> . . .	Queensland Agricultural Journal.
<i>Radium in Biol. Heilkunde</i>	Radium in Biologie und Heilkunde.
<i>Rec. Australian Mus.</i> . . .	Records of the Australian Museum.
<i>Rec. trav. bot. Néerland.</i> . . .	Racueil des travaux botaniques Néerlandaises.
* <i>Rec. trav. chim.</i> . . .	Racueil des travaux chimiques des Pays-Bas et de la Belgique.
<i>Rend. Accad. Sci. Fis. Mat. Napoli.</i>	Rendiconto dell' Accademia delle Scienze Fisiche e Matematiche, Napoli.
<i>Rend. Ist. Lomb. Sci. Lett.</i> . . .	Rendiconti dell' Istituto Lombardo di Scienze e Lettere.
<i>Rend. Soc. Chim. Ital.</i> . . .	Rendiconto della Società Chimica Italiana.
<i>Rep. Aust. Assoc. Sci.</i> . . .	Report of the Australian Association for the Advancement of Science.
<i>Rep. Brit. Assoc.</i> . . .	Report of the British Association for the Advancement of Science.
<i>Rep. Pharm.</i> . . .	Repertoire de Pharmacie.
<i>Rev. Viticult.</i> . . .	Revista Viticult.
<i>Rev. gén. Bot.</i> . . .	Revue générale de Botanique.
<i>Rev. gen. Chim. pure appl.</i>	Revue générale de Chimie pure et appliquée.
<i>Rev. Gén. Mat. Col.</i> . . .	Revue Générale des Matières Colorantes.
<i>Rev. Mét.</i> . . .	Revue de Métallurgie.
<i>Rev. Real Acad. Ciencias exact. Fisic. Mat. Madrid.</i>	Revista de la Real Academia de Ciencias exactas, Fisicas y Naturales de Madrid.
<i>Riv. Min. Crist. Ital.</i> . . .	Rivista di Mineralogia e Cristallografia Italiana.
<i>Russian Mining J.</i> . . .	Russian Mining Journal.
<i>Sbornik Klubu Pri.</i> . . .	Sbornik Klubu Prirodovedceho (Prague).
<i>Schimmel's Rep.</i> . . .	Schimmel's Reports.
<i>Schweiz. Apoth. Zeit.</i> . . .	Schweizerische Apotheker Zeitung.
<i>Schweiz. Woch. Chem. Pharm.</i>	Schweizerische Wochenschrift für Chemie und Pharmacie.
<i>Science</i> . . .	Science.
<i>Scient. Amer.</i> . . .	Scientific American.
* <i>Sci. Ind. Rep. Roure-Bertrand Fils.</i>	Scientific and Industrial Reports of Roure-Bertrand Fils.
<i>Sci. Proc. Roy. Dubl. Soc.</i> . . .	Scientific Proceedings of the Royal Dublin Society.
<i>Sci. Rev. Tohoku Imp. Univ.</i>	Science Reports, Tohoku Imperial University.
<i>Sci. Trans. Roy. Dubl. Soc.</i>	Scientific Transactions of the Royal Dublin Society.
<i>Seifenfabr.</i> . . .	Der Seifenfabrikant.
<i>Seifensied. Zeit.</i> . . .	Seifensieder Zeitung.
<i>Selsk. Khov. Les. Petrograd</i>	Selskoie Khoziaistvo i Lesovodstvo Petrograd.
<i>Shoe and Leather Rep.</i>	Shoe and Leather Reporter.
<i>Silikat-Zeits.</i> . . .	Silikat-Zeitschrift.

ABBREVIATED TITLE.	JOURNAL.
<i>Sitzungsber. Ges. Naturwiss. Marburg.</i>	Sitzungsberichte der Gesellschaft zur Beförderung der gesamten Naturwissenschaften in Marburg.
<i>Sitzungsber. Heidelberger Akad. Wiss.</i>	Sitzungsberichte der Heidelberger Akademie der Wissenschaften.
<i>Sitzungsber. K. Akad. Wiss. Berlin.</i>	Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften zu Berlin.
<i>Sitzungsber. K. Akad. München.</i>	Sitzungsberichte der Königlich bayerischen Akademie der Wissenschaften zu München.
<i>Sitzungsber. K. Akad. Wiss. Wien.</i>	Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften, Wien.
<i>Sitzungsber. Med. Naturwiss. Ges. Münster.</i>	Sitzungsberichte der Medizinisch-Naturwissenschaftlichen Gesellschaft zu Münster-in-Westfalens.
<i>Sitzungsber. Naturforsch. Ges. Petrograd.</i>	Sitzungsberichte der Naturforschenden Gesellschaft zu Petrograd.
<i>Sitzungsber. Naturforsch. Ges. Rostock.</i>	Sitzungsberichte der Naturforschenden Gesellschaft zu Rostock.
<i>Sitzungsber. phys. med. Ges. Erlangen.</i>	Sitzungsberichte der physikalisch-medizinischen Gesellschaft zu Erlangen.
<i>Skand. Arch. Physiol.</i>	Skandinavisches Archiv für Physiologie.
<i>Smithsonian Miscell. Coll.</i>	Smithsonian Miscellaneous Collections.
<i>Soil Sci.</i>	Soil Science.
<i>South African J. Sci.</i>	South African Journal of Science.
<i>Spezialmonats. Bran- Malz.</i>	Spezialmonatshefte für Bran- und Malzerei betriebskontrolle.
<i>Sprechtsaal.</i>	Sprechsaal.
<i>Stahl u. Eisen.</i>	Stahl und Eisen.
<i>Staz. sper. agr. ital.</i>	Stazioni sperimentali agrarie italiane.
<i>Strahlenther.</i>	Strahlentherapie.
<i>Sucr. Indig.</i>	Sucrerie Indigène.
<i>Süddent. Apoth. Zeit.</i>	Süddeutsche Apotheker Zeitung.
<i>Suikerind.</i>	De Suikerindustrie.
<i>Suom. Tied. Toim.</i>	Suomalaisen Tiedekatemian Toimituksia.
<i>Svensk Kem. Tidskr.</i>	Svenska Kemisk Tidskrift.
<i>T.</i>	Transactions of the Chemical Society.
<i>Teknikern.</i>	Teknikern.
<i>Tekn. Tidskr.</i>	Teknisk Tidskrift.
<i>Textile Col.</i>	Textile Colourist.
<i>Ther. Gegenw.</i>	Die Therapie der Gegenwart.
<i>Ther. Monatsh.</i>	Therapeutische Monatshefte.
<i>Tidsk. Kemi, Farm., Ter.</i>	Tidskrift Kemi, Farm. og Terape.
<i>Tidsk. Teknikern.</i>	Tidskriften Teknikern.
<i>Times Eng. Suppl.</i>	Times Engineering Supplement.
<i>Tonind.-Zeit.</i>	Tonindustrie-Zeitung.
<i>Trans. Amer. Ceram. Soc.</i>	Transactions of the American Ceramic Society.
<i>Trans. Amer. Electrochem. Soc.</i>	Transactions of the American Electrochemical Society.
<i>Trans. Amer. Foundrymen's Assoc.</i>	Transactions of the American Foundrymen's Association.
<i>Trans. Amer. Inst. Chem. Eng.</i>	Transactions of the American Institute of Chemical Engineers.
<i>Trans. Amer. Inst. Metals.</i>	Transactions of the American Institution of Metals.
<i>Trans. Amer. Inst. Min. Eng.</i>	Transactions of the American Institute of Mining Engineers.
<i>Trans. Engl. Ceram. Soc.</i>	Transactions of the English Ceramic Society.
<i>Trans. Faraday Soc.</i>	Transactions of the Faraday Society.
<i>Trans. Inst. Metals.</i>	Transactions of the Institute of Metals.
<i>Trans. Iron and Steel Inst.</i>	Transactions of the Iron and Steel Institute.
<i>Tr. N. Eng. Inst. Min. and Met.</i>	Transactions of the North of England Institute of Mining and Metallurgy.
<i>Trans. New Zealand Inst.</i>	Transactions of the New Zealand Institute.
<i>Trans. Nova Scotia Inst. Sci.</i>	Transactions of the Nova Scotia Institute of Science.

XIV JOURNALS FROM WHICH ABSTRACTS ARE MADE.

ABBREVIATED TITLE.	JOURNAL.
<i>Trans. Path. Soc.</i> . . .	Transactions of the Pathological Society.
<i>Trans. Roy. Irish Acad.</i> . . .	Transactions of the Royal Irish Academy.
<i>Trans. Roy. Soc. Canada</i> . . .	Transactions of the Royal Society of Canada.
<i>Trans. Roy. Soc. Edin.</i> . . .	Transactions of the Royal Society of Edinburgh.
<i>Trans. Surveyors' Inst.</i> . . .	Transactions of the Surveyors' Institute.
<i>Trav. Mus. Geol. Acad. Sci. Petrograd.</i> . . .	Travaux de Musée Géologique près l'Académie Impériale des Sciences de Petrograd.
<i>Trac. Soc. Natur. Petrograd.</i> . . .	Travaux de la Société Impériale des Naturalistes de Petrograd.
<i>Tropenpflanzer</i> . . .	Tropenpflanzer.
<i>Tsch. Min. Mitt.</i> . . .	Tschermak's Mineralogische Mitteilungen.
<i>U.S. Bureau of Mines, Bull. and Tech. Papers.</i> . . .	United States Bureau of Mines, Bulletins and Technical Papers.
<i>U.S. Bureau Plant Ind.</i> . . .	United States Bureau of Plant Industry.
<i>U.S. Comm. Rept.</i> . . .	United States Commerce Reports, Daily Consular and Trade Reports.
<i>U.S. Dept. Agric. Bull.</i> . . .	United States Department of Agriculture Bulletins.
<i>U.S. Hyg. Labor. Bull.</i> . . .	United States Hygienic Laboratory Bulletins.
<i>U.S. Pat.</i> . . .	United States Patent.
<i>Univ. Illinois Bull.</i> . . .	University of Illinois Bulletins.
<i>Utah Agric. Coll. Exper. Stat. Bull.</i> . . .	Utah Agricultural College Experiment Station Bulletins.
<i>Ver. deut. Textilver.</i> . . .	Verein deutscher Textilveredlungsindustrie.
<i>Verh. Geol. Reichsanst. Wien.</i> . . .	Verhandlungen der k. k. geologischen Reichsanstalt in Wien.
<i>Verh. Ges. deut. Naturforsch. Aertze.</i> . . .	Verhandlung der Gesellschaft deutscher Naturforscher und Aerzte.
<i>Verh. Naturhist. med. Ver. Heidelberg.</i> . . .	Verhandlungen des naturhistorisch-medizinischen Vereins zu Heidelberg.
<i>Verh. Naturhist. Rheinl.</i> . . .	Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande und Westfalens.
<i>Verh. Physiol. Gas. Berlin</i> . . .	Verhandlungen der Physiologischen Gesellschaft zu Berlin.
<i>Verh. Schweiz. Nat. Ges.</i> . . .	Verhandlungen der Schweizerischen Naturforschenden Gesellschaft, Basel.
<i>Verslag Landb.</i> . . .	Verslag Landbouwkund Onderzoek Ryklandsbouwproefstat.
<i>Vet. Rec.</i> . . .	Veterinary Record.
<i>Vict. Mem. Mus. Geol. Survey, Canada.</i> . . .	Victoria Memorial Museum Geological Survey of Canada, Bulletin.
<i>Videnskab. Skrifter</i> . . .	Skrifter udgivne af Videnskabselskabet i Kristiania.
<i>Wasser u. Gas</i> . . .	Wasser und Gas.
<i>West Ind. Agric. News</i> . . .	West Indian Agricultural News.
<i>West Ind. Bull.</i> . . .	West Indian Bulletin.
<i>Westnik Sacch. Prom.</i> . . .	Westnik Saccharnoi Promyshlennosti.
<i>Wiener Klin. Woch.</i> . . .	Wiener Klinische Wochenschrift.
<i>Wiss. Abhandl. Physikal.-Tech. Reichsanst.</i> . . .	Wissenschaftliche Abhandlungen der Physikalischen Technischen Reichsanstalt.
<i>Wochbl. Papierfabr.</i> . . .	Wochenblatt für Papierfabrikation.
<i>Woch. f. Brau.</i> . . .	Wochenschrift für Brauerei.
<i>Yakugakuzashi</i> . . .	Yakugakuzashi.
<i>Zeitsch. allg. Physiol.</i> . . .	Zeitschrift für allgemeine Physiologie.
<i>*Zeitsch. anal. Chem.</i> . . .	Zeitschrift für analytische Chemie.
<i>Z. angew. Chem.</i> . . .	Zeitschrift für angewandte Chemie.
<i>*Zeitsch. anorg. Chem.</i> . . .	Zeitschrift für anorganische und allgemeine Chemie.
<i>Zeitsch. Biol.</i> . . .	Zeitschrift für Biologie.
<i>Zeitsch. deut. Geol. Ges.</i> . . .	Zeitschrift der deutschen Geologischen Gesellschaft.
<i>*Zeitsch. Elektrochem.</i> . . .	Zeitschrift für Elektrochemie.
<i>Zeitsch. exp. Path. Ther.</i> . . .	Zeitschrift für experimentelle Pathologie und Therapie.
<i>Z. Farben-Ind.</i> . . .	Zeitschrift für Farben-Industrie.

JOURNALS FROM WHICH ABSTRACTS ARE MADE.

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ABBREVIATED TITLE.	JOURNAL.
<i>Z. Forst- u. Jagdwesen</i> . . .	Zeitschrift für Forst- und Jagdwesen.
<i>Z. Gärungsphysiol.</i> . . .	Zeitschrift für Gärungsphysiologie.
<i>Z. ges. Brauw.</i> . . .	Zeitschrift für das gesammte Brauwesen.
<i>Zeitsch. ges. exp. Med.</i> . . .	Zeitschrift für die gesammte experimentelle Medizin.
<i>Z. ges. Getreidew.</i> . . .	Zeitschrift für das gesammte Getreidewesen.
<i>Z. ges. Schiess- u. Sprengstoffw.</i> . . .	Zeitschrift für das gesammte Schiess- und Sprengstoffwesen.
<i>Zeitsch. Hyg.</i> . . .	Zeitschrift für Hygiene und Infektionskrankheiten.
<i>Zeitsch. Immunol.</i> . . .	Zeitschrift für Immunitätsforschung und experimentelle Therapie.
<i>Zeitsch. Instrument.</i> . . .	Zeitschrift für Instrumentenkunde.
<i>Z. Kali</i> . . .	Zeitschrift für Kali.
<i>Zeitsch. Kryst. Min.</i> . . .	Zeitschrift für Krystallographie und Mineralogie.
<i>Z. landw. Versuchsw. Oesterr.</i> . . .	Zeitschrift für das landwirtschaftlichen Versuchswesen in Oesterreich.
<i>Z. öffentl. Chem.</i> . . .	Zeitschrift für öffentliche Chemie.
<i>*Zeitsch. physikal. Chem.</i> . . .	Zeitschrift für physikalische Chemie, Stöchiometrie und Verwandtschaftslehre.
<i>Zeitsch. physikal. Chem. Unterr.</i> . . .	Zeitschrift für den physikalischen und Chemischen Unterricht.
<i>Zeitsch. physiol. Chem.</i> . . .	Hoppe-Seyler's Zeitschrift für physiologische Chemie.
<i>Zeitsch. prakt. Geol.</i> . . .	Zeitschrift für praktische Geologie.
<i>Z. Spiritusind.</i> . . .	Zeitschrift für Spiritusindustrie.
<i>Z. Unters. Nahr. Genussm.</i> . . .	Zeitschrift für Untersuchung der Nahrungs- und Genussmittel.
<i>Z. Ver. deut. Zuckerind.</i> . . .	Zeitschrift des Vereins der deutschen Zucker-Industrie.
<i>Zeitsch. wiss. Mikrosk.</i> . . .	Zeitschrift für wissenschaftliche Mikroskopie und mikroskopische Technik.
<i>*Zeitsch. wiss. Photochem.</i> . . .	Zeitschrift für wissenschaftliche Photographie, Photo-physik und Photochemie.
<i>Z. Zuckerind. Böhm.</i> . . .	Zeitschrift für Zuckerindustrie in Böhmen.

